

LBT-V502/V502CD/V502CDM

SERVICE MANUAL

- LBT-V502/V502CD/V502CDM is composed of following models. As for the service manual, it is issued for each component model, then, please refer to it.

AEP Model
UK Model
E Model
Australian Model

COMPONENT MODEL NAME

SYSTEM NUMBER COMPONENT	LBT-V502 (AEP, WG, IT)	LBT-V502 (E2)	LBT-V502 (E3, Saudi, AUS)	LBT-V502CD (UK)	LBT-V502CDM (UK)
TUNER	ST-V502	ST-V502	ST-V502	ST-V502	ST-V502
STEREO DECK AMPLIFIER	DXA-V502	DXA-V502	DXA-V502	DXA-V502	DXA-V502
SPEAKER SYSTEM	SS-A502	SS-D502AV	SS-D502AV	SS-A502	SS-A502
TURNTABLE SYSTEM	—	PS-V702P	—	PS-LX44P	PS-LX44P
CD PLAYER	—	—	—	CDP-M48	CDP-C301M

PARTS LIST

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- WG : West Germany model
- IT : Italian model
- Saudi : Saudi Arabia model
- AUS : Australian model
- E2 : E model with turntable system
- E3 : E model without turntable system

ACCESSORY & PACKING MATERIAL

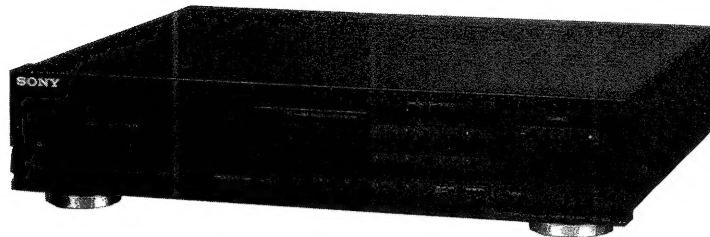
Part No.	Description	Part No.	Description
1-465-455-11	REMOTE COMMANDER(RM-S530)	*4-896-384-01	(UK)...CUSHION(R)(for PS-LX44P)
1-501-369-11	(AEP, UK)...ANTENNA	*4-896-385-01	(UK)...CUSHION(L)(for PS-LX44P)
1-501-374-11	ANTENNA, LOOP	*4-914-075-01	CUSHION(SP)
1-575-668-11	CORD(WITH CONNECTOR)	4-920-940-01	SHEET, PROTECTION(for ST-V502)
3-701-806-00	(UK, E2)...ADAPTOR, 45, (E)	4-921-934-01	SHEET, PROTECTION(for DXA-V502)
3-707-584-01	COVER, BATTERY(for RM-S530)	*4-934-860-01	CUSHION(for ST-V502)
3-751-553-11	(AEP)...MANUAL, INSTRUCTION	*4-935-383-01	CUSHION(for DXA-V502)
3-751-553-41	(AEP)...MANUAL, INSTRUCTION	*4-937-343-01	(AEP, AUS)...INDIVIDUAL CARTON
3-751-553-51	(AEP)...MANUAL, INSTRUCTION	*4-937-344-01	(UK:V502CD)...INDIVIDUAL CARTON
3-751-553-61	(E2, E3, Saudi, AUS)...MANUAL, INSTRUCTION	*4-937-345-01	(UK:V502CDM)...INDIVIDUAL CARTON
3-751-553-71	(Saudi)...MANUAL, INSTRUCTION	*4-937-347-01	(E2)...INDIVIDUAL CARTON
3-751-555-51	(E2)...MANUAL, INSTRUCTION(PS-V702P)	*4-937-348-01	(E3, Saudi)...INDIVIDUAL CARTON
4-895-478-01	(E2)...INNER PLATE(for PS-V702P)		
*4-896-228-01	(E2)...CUSHION(R)(for PS-V702P)		
*4-896-229-01	(E2)...CUSHION(L)(for PS-V702P)		

COMPACT HI-FI STEREO SYSTEM
SONY®

ST-V502

SERVICE MANUAL

AEP Model
UK Model





This set is FM stereo/FM-AM

Tuner section in LBT-V502/V502CD/
V502CDG.

SPECIFICATIONS

Tuner	
System	FM stereo FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	75 ohms unbalanced
Intermediate frequency	10.7 MHz
MW/LW tuner section	
Tuning range	MW: 522 to 1,611kHz (Italian model) 531 to 1,602kHz (other models) LW: 144 to 288kHz (Italian model) 153 to 279kHz (other models)
Antenna	AM loop antenna External antenna terminal
Intermediate frequency	450 kHz
Power requirements	240V AC, 50Hz (UK model) 220V AC, 50Hz (other models)
Power consumption	10 W
AC outlet	2 switched, total 500 W max.
Weight	Approx. 2.4 kg
Dimensions	Approx. 355 × 80 × 312 mm (w/h/d, including projections)

SAFETY-RELATED COMPONENT WARNING!!

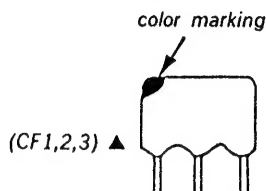
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

FM STEREO/FM-AM TUNER
SONY®

SECTION 1 SERVICING NOTES

Note on Ceramic Filter (CF1,2,3) ▲ Replacement.

This set employs three ceramic filters (CF1,2,3) ▲ which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by * D609, * D610 is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



○ : Mounted
× : not Mounted

Ceramic filter		Mount		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	* D609	* D610	
White	10.750	○	×	10.750
Red	10.700	×	×	10.700
Black	10.650	×	○	10.650

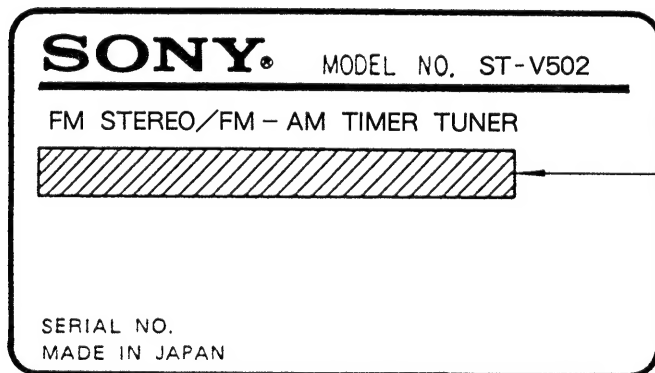
FM intermediate frequency is determined by the three types as shown above, Ceramic filters of same center frequency, i.e., of same color coding should be used for CF1, CF2, and CF3.

When replacing the ceramic filters, perform the FM Discriminator Adjustment.

▲ : AEP, UK Model : CF1, 2
WG, IT Model : CF1, 2, 3

MODEL IDENTIFICATION

— Specification Label —

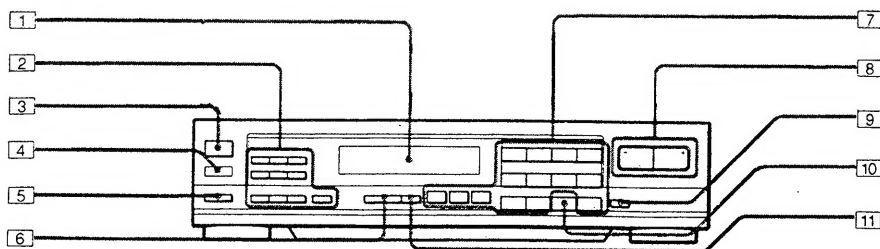


AEP, West Germany,

Italian Model : AC : 220V ~ 50/60 Hz

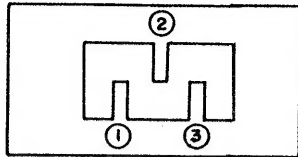
UK Model : AC : 240V ~ 50/60 Hz

LOCATION OF CONTROLS

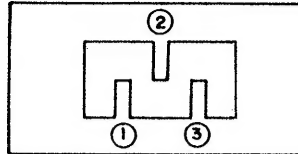


- 1 Display window
- 2 Buttons for setting the clock and timer
- 3 SYSTEM POWER switch
- 4 Remote sensor
- 5 SLEEP button
- 6 FREQUENCY/TIME button
- 7 Buttons for storing station frequencies
- 8 TUNING buttons
- 9 BAND selector
- 10 MEMORY SCAN button
- 11 AUTO tuning button

Signal of System Control Connector

CNJ901
SYSTEM CONTROL 1

1	L-CH OUT
2	GND
3	R-CH OUT

CNJ701
SYSTEM CONTROL 2

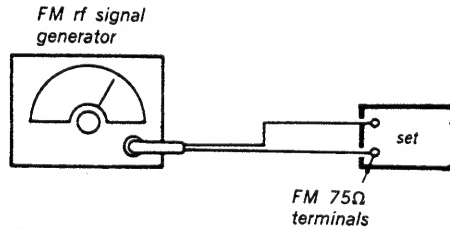
1	AUB
2	GND
3	

SECTION 2
ELECTRICAL ADJUSTMENTS

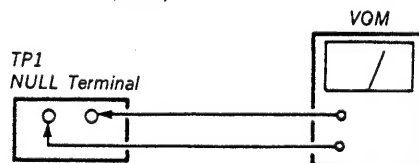
FM SECTION

FM DISCRIMINATOR ADJUSTMENT

Setting:



Carrier frequency : 98MHz
 Modulation : 1kHz, 40kHz deviation (100%)
 Output level : 1mV (60dB)



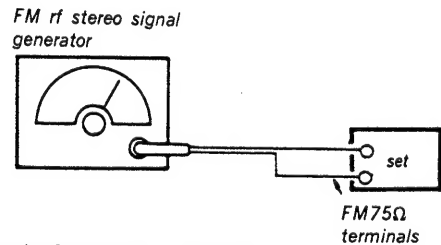
Procedure :

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note : FM tuning level adjustment should be made after FM discriminator alignment.

FM TUNING LEVEL ADJUSTMENT

Setting :



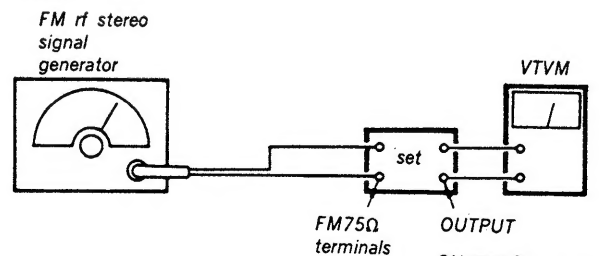
Carrier frequency : 98MHz
 Modulation : 1kHz, 40kHz deviation (100%)
 Output level : 17.8μV (25dB)

Procedure :

1. Tune the set to 98MHz.
2. Adjust RV24 so that the TUNED LED goes on.

FM STEREO SEPARATION ADJUSTMENT

Procedure :



Carrier frequency : 98MHz
 Output level : 1mV (60dB)
 Modulation
 Audio 400Hz : 16.25kHz deviation
 Sub channel 38kHz : 16.25kHz deviation
 Pilot signal 19kHz : 7.5kHz deviation

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ [ⓑ] Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ [Ⓓ] Adjust RV21 for minimum reading.

L-CH Stereo separation: Ⓐ—Ⓑ

R-CH Stereo separation: Ⓒ—Ⓓ

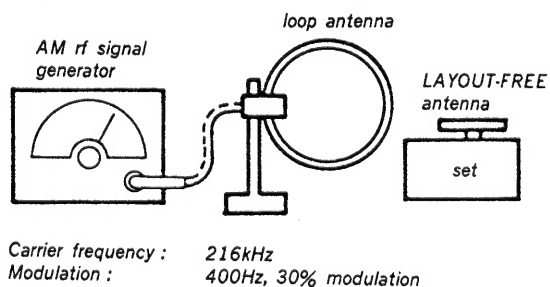
The separations of both channels should be equal.

MW/LW SECTION

AM TUNING LEVEL ADJUSTMENT

BAND select switch: LW

Setting:

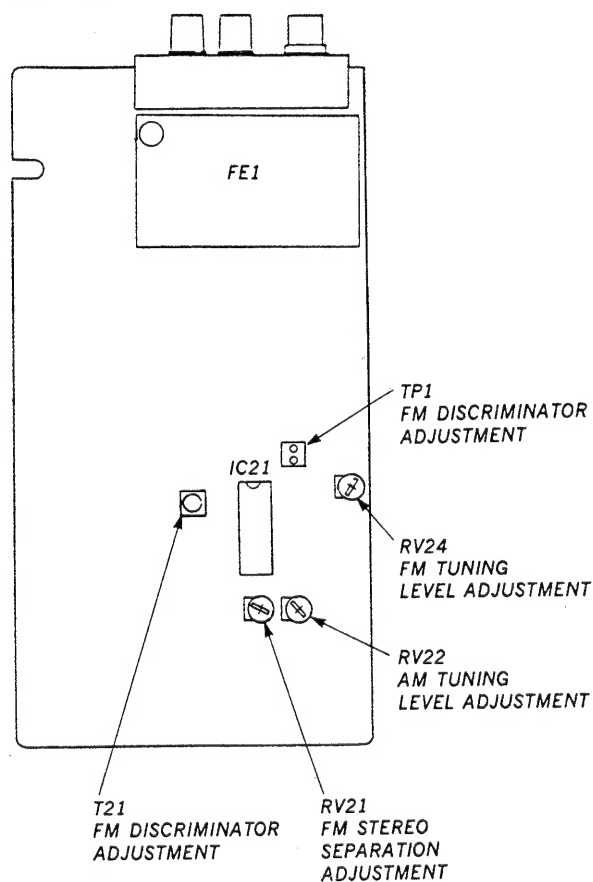


Procedure:

1. Set loop antenna so that the LAYOUT-FREE antenna input level becomes 2.5mV/m (68dB).
2. Tune the set to 216kHz.
3. Adjust the RV22 so that the TUNED LED goes on.

Adjustment Location:

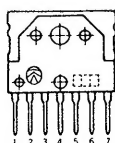
—tuner board—



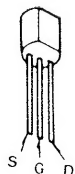
SECTION 3 DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUTS

LA5667



2SK246-GR3



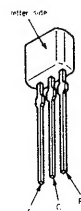
2SB1116A-L



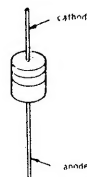
DTA144ES
DTC114ES
2SA1317-STU
2SC2603-EF
2SC2669-OY
2SC3113-A
2SC3330-STU
2SC3402



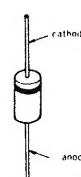
2SC2785-HFE



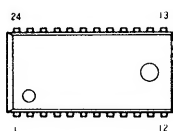
HZS27-2L
1SS120



UZP-6.8B
10E2N



LC7218



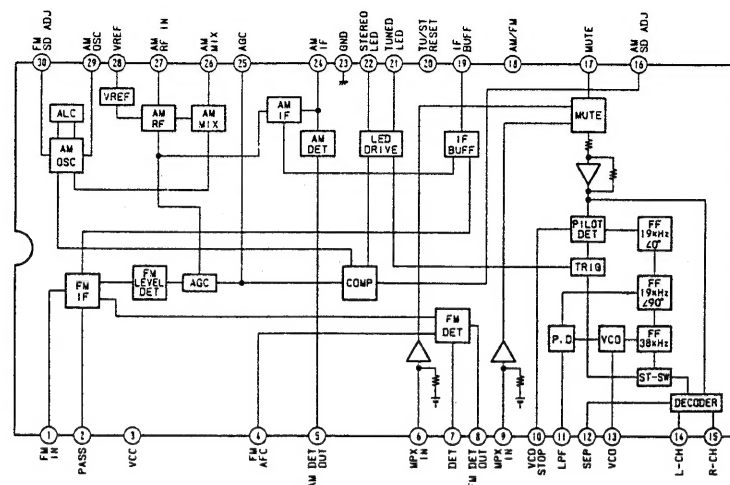
GP1U52XB



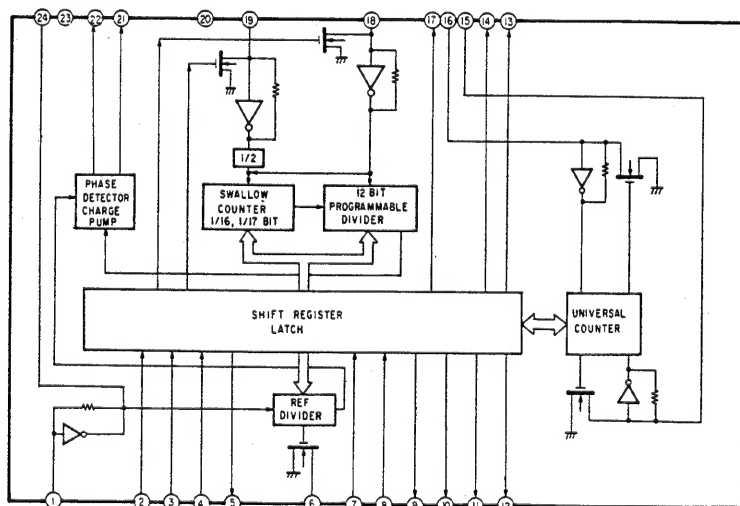
3-3. TUNER SECTION PRINTED WIRING BOARD

3-2. IC BLOCK DIAGRAMS

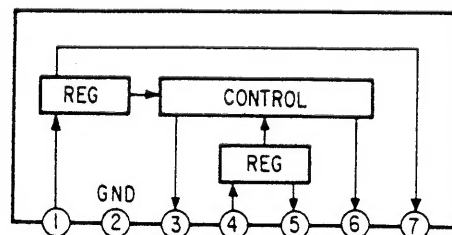
IC21 LA1851N



IC81 LC7218

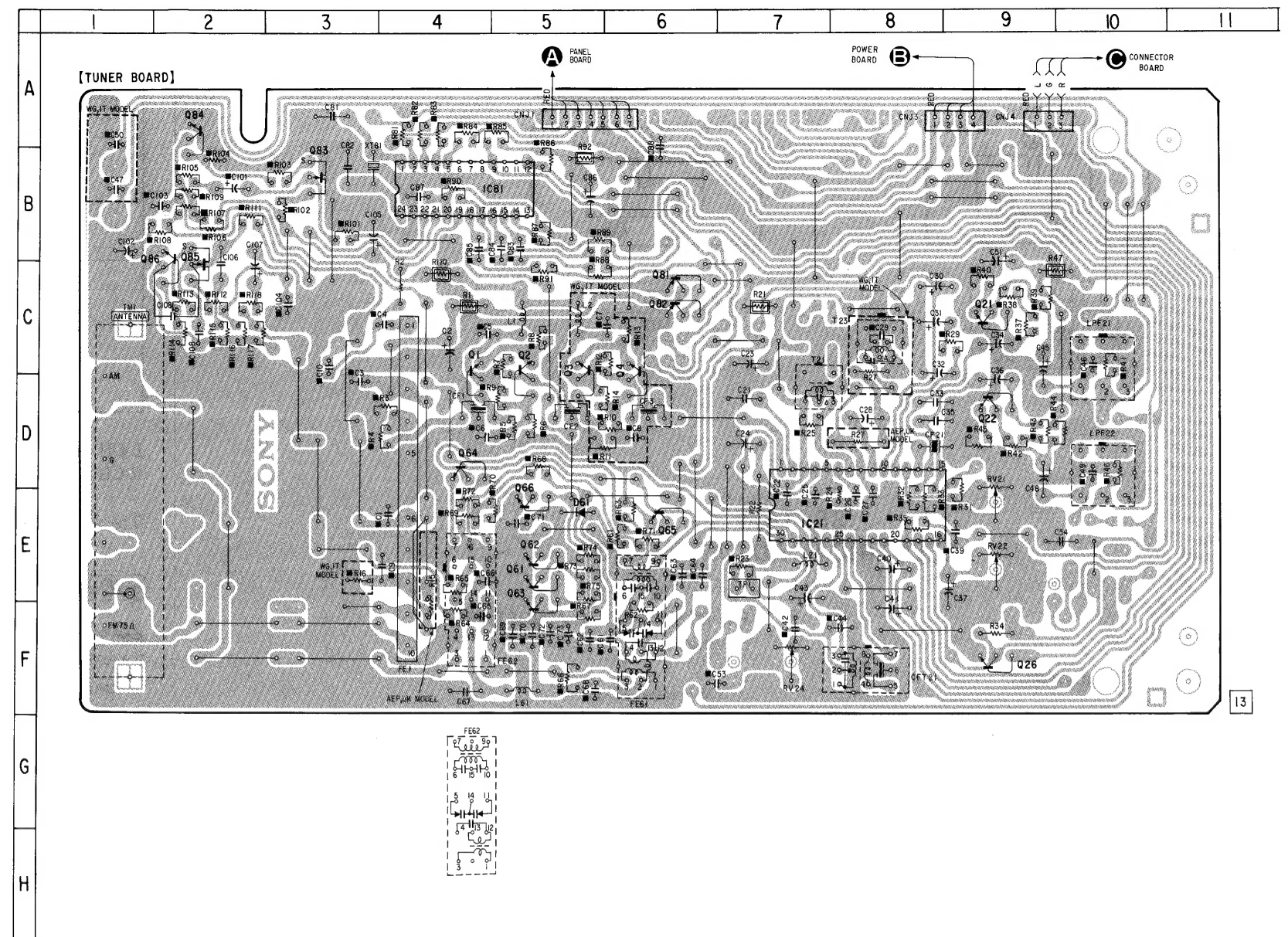


IC701 LA5667



• Semiconductor Location

Ref. No.	Location
D61	E-5
IC21	E-8
IC81	B-4
Q1	D-4
Q2	D-5
Q3	D-5
Q4	D-6
Q21	C-9
Q22	D-9
Q26	F-9
Q61	E-5
Q62	E-5
Q63	F-6
Q64	D-4
Q65	E-6
Q66	E-5
Q81	C-6
Q82	C-6
Q83	B-3
Q84	A-2
Q85	C-2
Q86	C-2



• Note on Schematic Diagram

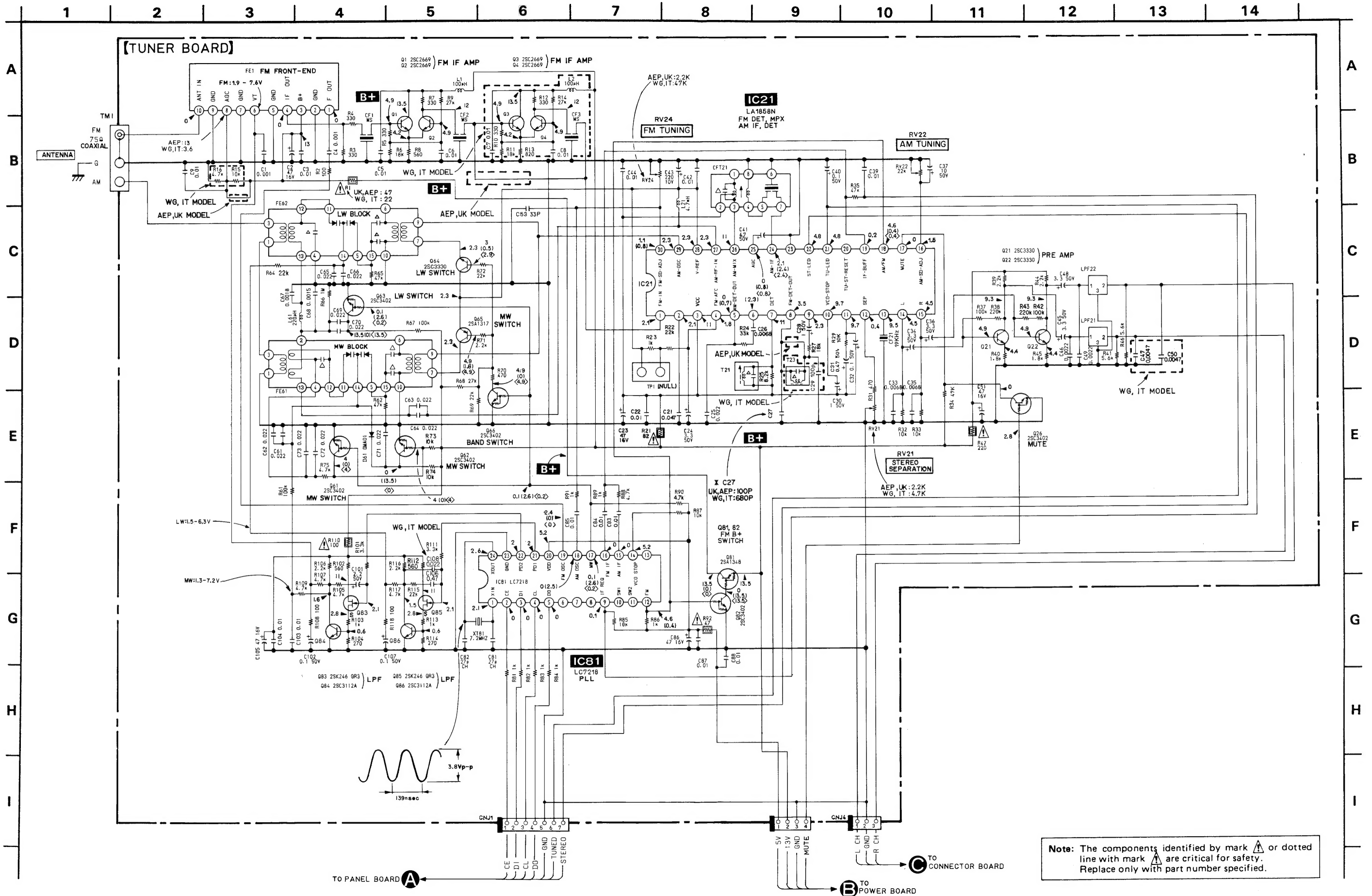
- *D609, *D610: See page 2 for Note on Ceramic Filter (CF1, 2, 3) ▲ Replacement.
- All capacitors are in μF unless otherwise noted. pF ; μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- Δ : internal component.
- \square : nonflammable resistor.
- \square : B+ Line
- \square : B- Line

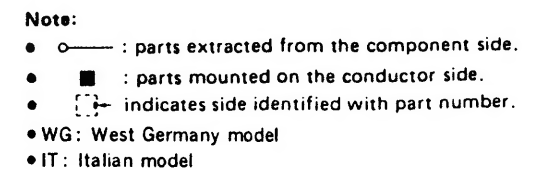
- \square : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark: FM
() : AM
< > : LW
- Voltages are taken with a VOM (input impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
 \Rightarrow : FM
- WG: West Germany model
- IT: Italian model

• Note on Printed Wiring Board

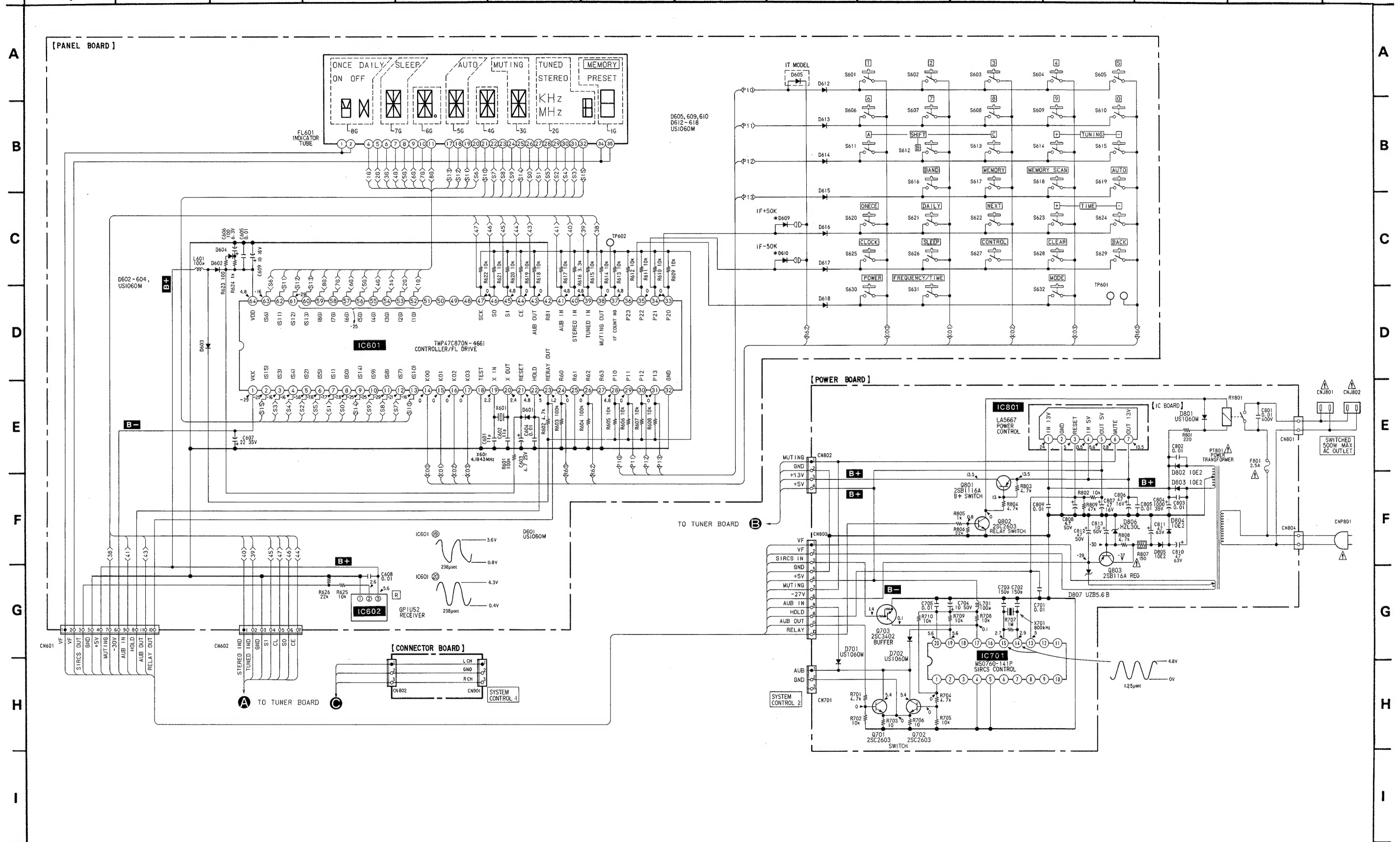
- \circ : parts extracted from the component side.
- \blacksquare : parts mounted on the conductor side.
- \square indicates side identified with part number.
- WG: West Germany model
- IT: Italian model

3-4. TUNER SECTION SCHEMATIC DIAGRAM

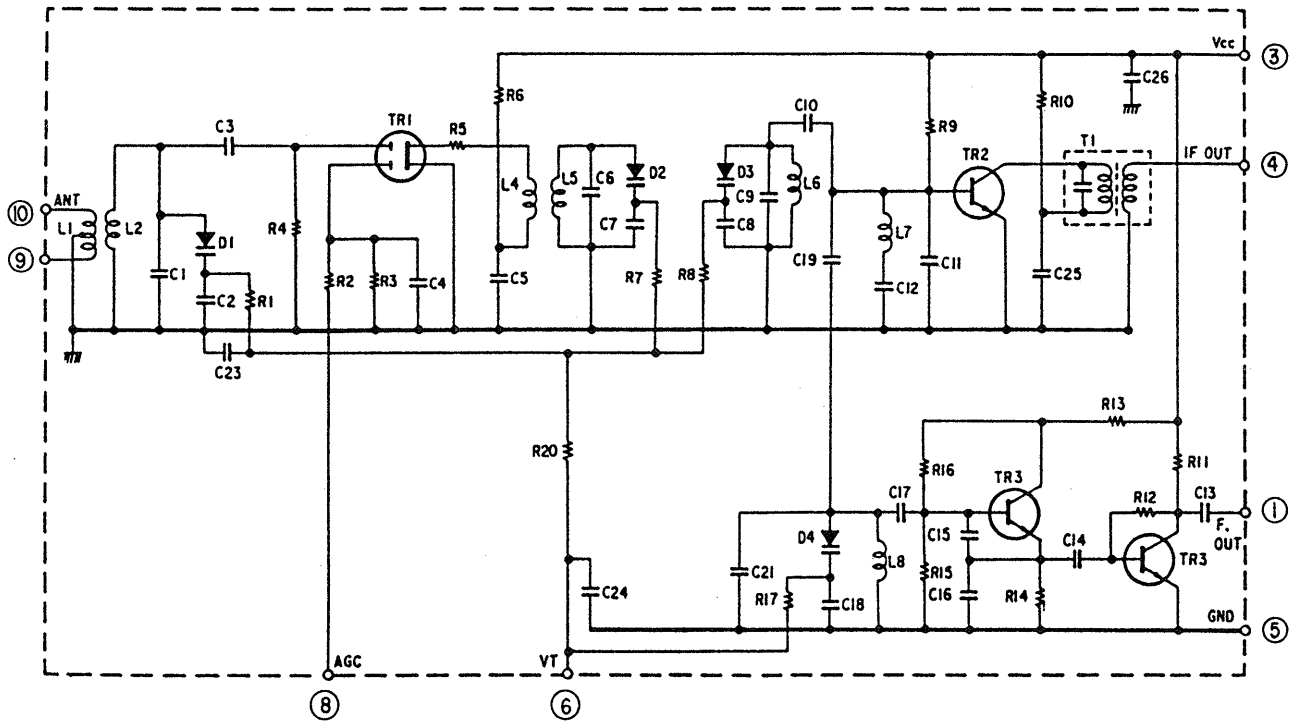




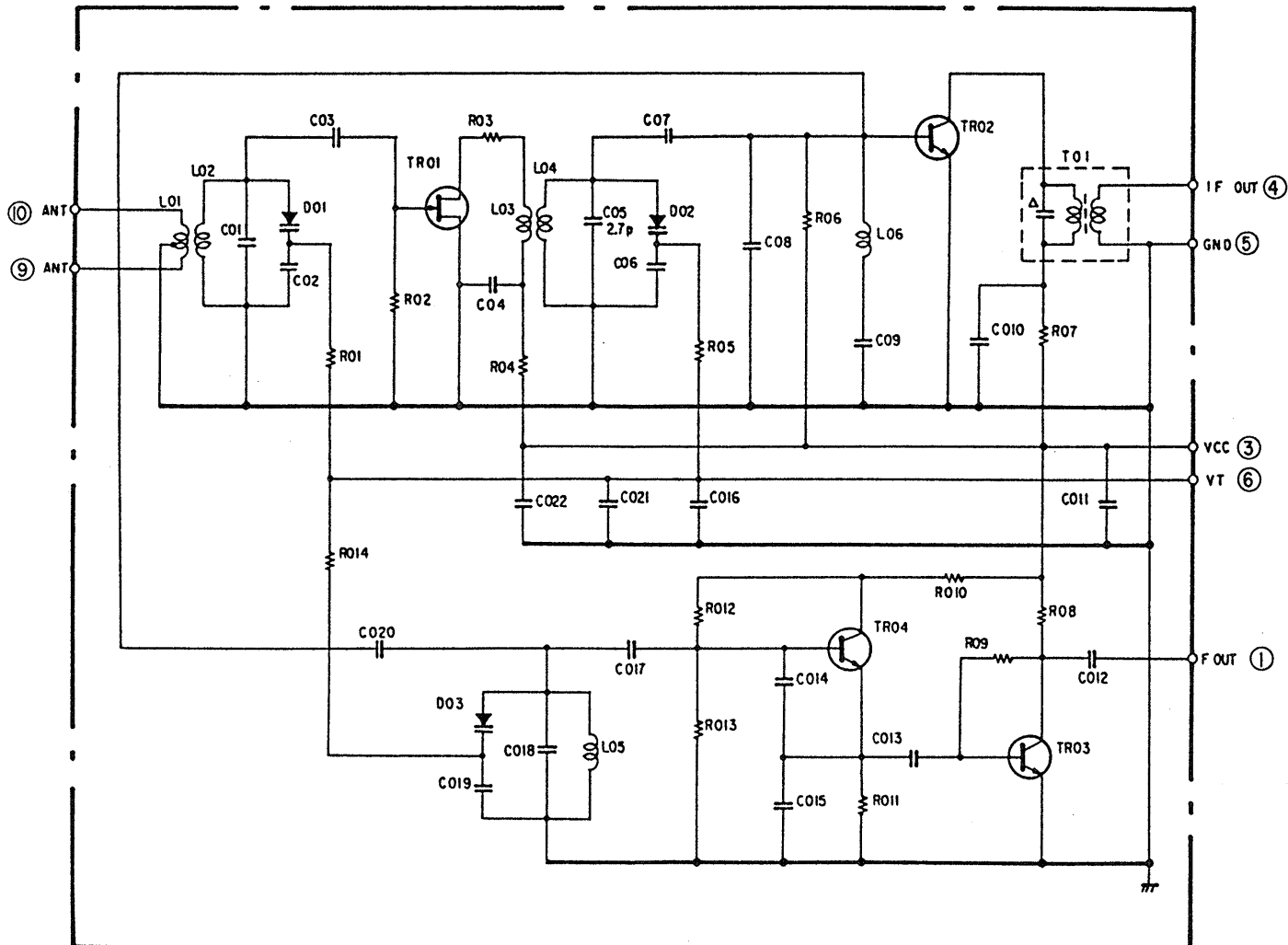
1	2	3	4	5	6	7	8	9	10	11	12	13	14
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3-7. FM FRONT-END (FE1) SCHEMATIC DIAGRAMS (West Germany, Italian Model)



(AEP, UK Model)



SECTION 4

EXPLODED VIEW

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.



- Color Indication of Appearance Parts
Example:

(RED) ... KNOB, BALANCE (WHITE)

↑

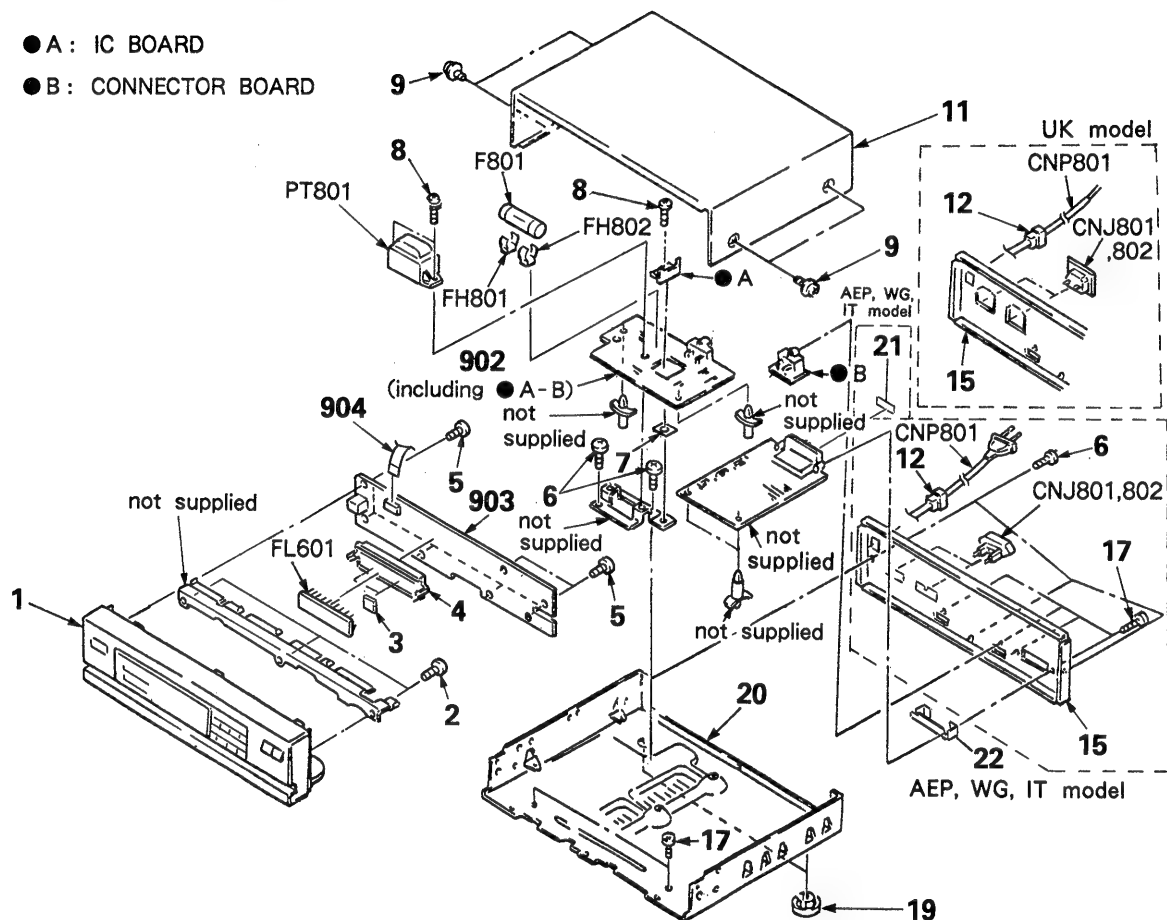
Cabinet's Color

Parts Color

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

- WG: West Germany model
- IT : Italian model

- A : IC BOARD
- B : CONNECTOR BOARD



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	X-4917-289-1	PANEL ASSY, FRONT		902	*A-4334-501-A	(AEP)....MOUNTED PCB, POWER	
2	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S			*A-4334-503-A	(WG,IT)...MOUNTED PCB, POWER	
3	*4-921-941-31	CUSHION (FL)			*A-4334-822-A	(UK).....MOUNTED PCB, POWER	
4	*4-923-103-01	HOLDER, FL TUBE		903	*A-4334-497-A	(AEP)...MOUNTED PCB, PANEL	
5	4-928-635-01	SCREW, +BV (2.6X8) TAPPING			*A-4334-499-A	(WG)....MOUNTED PCB, PANEL	
6	7-682-547-09	SCREW +BVTT 3X6 (S)			*A-4334-500-A	(IT)....MOUNTED PCB, PANEL	
7	*4-937-354-01	SHEET			*A-4334-821-A	(UK)....MOUNTED PCB, PANEL	
8	3-703-249-31	SCREW, S TIGHT, +PTTWH (M3X10)		904	1-575-666-11	WIRE, FLAT TYPE (11 CORE)	
9	3-704-366-01	SCREW (CASE) (M3X8)			CNJ801A1-526-751-00	(UK).....OUTLET, AC	
11	4-919-389-31	CASE			CNJ801A1-526-794-11	(AEP,WG,IT)...OUTLET, AC	
12	*3-703-244-00	BUSHING (2104), CORD			CNJ802A1-526-751-00	(UK).....OUTLET, AC	
15	*4-934-871-11	(AEP,IT)...PANEL, BACK			CNJ802A1-526-794-11	(AEP,WG,IT)...OUTLET, AC	
	*4-934-871-21	(UK).....PANEL, BACK			CNP801A1-575-651-11	(AEP,WG,IT)...CORD, POWER	
	*4-934-871-41	(WG).....PANEL, BACK			CNP801A1-575-652-11	(UK).....CORD, POWER	
17	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		F801 A.1-532-286-00	FUSE, TIME-LAG (2.5A)		
19	4-933-601-01	FOOT		FH801 1-533-213-31	HOLDER, FUSE		
20	*4-924-520-01	CHASSIS		FH802 1-533-213-31	HOLDER, FUSE		
21	*4-612-009-01	(WG,IT)...SPACER (A)		FL601 1-519-595-11	INDICATOR TUBE, FLUORESCENT		
22	*4-924-988-11	PLATE (ST), GROUND		PT801A.1-449-979-11	TRANSFORMER, POWER		

SECTION 5 ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:MF: μ F, PF: μ μ F.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORSIn each case, U: μ , for example:UA...: μ A..., UPA...: μ PA...,
UPC...: μ PC, UPD...: μ PD...

The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

- WG: West Germany model
- IT : Italian model

TUNER SECTION

Ref.No.	Part No.	Description							
C1	1-162-294-31	CERAMIC CHIP	0.001MF	20%	25V				
C2	1-126-101-11	ELECT	100MF	20%	16V				
C3	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C4	1-162-294-31	CERAMIC CHIP	0.001MF	20%	25V				
C5	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C6	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C7	1-163-059-00	(WG,IT)...CERAMIC MELF	0.01MF	20%	16V				
C8	1-163-059-00	(WG,IT)...CERAMIC MELF	0.01MF	20%	16V				
C9	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C11	1-101-005-00	(WG,IT)...CERAMIC	0.022MF		50V				
C21	1-101-006-00	CERAMIC	0.047MF		50V				
C22	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C23	1-124-477-11	ELECT	47MF	20%	16V				
C24	1-123-382-00	ELECT	3.3MF	20%	50V				
C25	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C26	1-163-019-00	CERAMIC CHIP	0.0068	20%	12V				
C27	1-162-516-11	(AEP,UK)...CERAMIC CHIP	100PF	10%	50V				
C27	1-163-007-11	(WG,IT)...CERAMIC CHIP	680PF	20%	50V				
C28	1-124-791-11	ELECT	1.0MF	20%	50V				
C29	1-162-516-11	(WG,IT)...CERAMIC CHIP	100PF	10%	50V				
C30	1-124-791-11	ELECT	1.0MF	20%	50V				
C31	1-124-902-00	ELECT	0.47MF	20%	50V				
C32	1-124-463-00	ELECT	0.1MF	20%	50V				
C33	1-130-481-00	FILM	0.0068MF	5%	50V				
C34	1-123-382-00	ELECT	3.3MF	20%	50V				
C35	1-130-481-00	FILM	0.0068MF	5%	50V				
C36	1-123-382-00	ELECT	3.3MF	20%	50V				
C37	1-123-875-11	ELECT	10MF	20%	50V				
C39	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C40	1-124-463-00	ELECT	0.1MF	20%	50V				
C41	1-124-927-11	ELECT	4.7MF	20%	50V				
C42	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C43	1-126-176-11	ELECT	220MF	20%	10V				
C44	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C45	1-123-382-00	ELECT	3.3MF	20%	50V				
C46	1-161-375-00	CERAMIC CHIP	0.0022MF	20%	25V				
C47	1-163-170-00	(WG,IT)...CERAMIC CHIP	0.0047MF	20%	25V				
C48	1-123-382-00	ELECT	3.3MF	20%	50V				
C49	1-161-375-00	CERAMIC CHIP	0.0022MF	20%	25V				
C50	1-163-170-00	(WG,IT)...CERAMIC CHIP	0.0047MF	20%	25V				
C51	1-124-477-11	ELECT	47MF	20%	16V				
C53	1-163-105-00	CERAMIC CHIP	33PF	5%	50V				
C54	1-101-005-00	(WG,IT)...CERAMIC	0.022MF		50V				
C61	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C62	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C63	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C64	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C65	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C66	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C67	1-102-120-00	CERAMIC	0.0018MF	10%	50V				
C68	1-163-111-11	CERAMIC CHIP	0.0015MF	20%	25V				
C69	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C70	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C71	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C72	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C73	1-163-063-00	CERAMIC MELF	0.022MF		25V				
C81	1-102-961-00	CERAMIC	27PF	5%	50V				
C82	1-102-961-00	CERAMIC	27PF	5%	50V				
C83	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C84	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C85	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C86	1-124-477-11	ELECT	47MF	20%	16V				
C87	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C88	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C101	1-124-925-11	ELECT	2.2MF	20%	50V				
C102	1-124-463-00	ELECT	0.1MF	20%	50V				
C103	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C104	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V				
C105	1-124-477-11	ELECT	47MF	20%	16V				
C106	1-136-173-00	MYLAR	0.47MF	5%	50V				
C107	1-124-463-00	ELECT	0.1MF	20%	50V				
C108	1-163-063-00	(WG,IT)...CERAMIC MELF	0.022MF		25V				
CF1	1-567-389-11	FILTER, CERAMIC							
CF2	1-567-389-11	FILTER, CERAMIC							
CF3	1-567-389-11	(WG,IT)...FILTER, CERAMIC							
CF21	1-577-075-11	OSCILLATOR, CERAMIC (19kHz)							
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)							
CNJ1	*1-568-273-11	SOCKET, CONNECTOR 7P							
CNJ3	*1-568-308-11	SOCKET, CONNECTOR 4P							
CNJ4	1-568-269-11	SOCKET, CONNECTOR 3P							
D61	8-719-912-20	DIODE 1SS120							
FE1	1-463-857-11	(WG,IT)...FRONT END (FM)							
FE1	1-463-862-21	(AEP,UK)...FRONT END (FM)							
FE61	1-236-462-11	ENCAPSULATED COMPONENT (MW RF BLOCK)							
FE62	1-236-463-11	ENCAPSULATED COMPONENT (LW RF BLOCK)							
IC21	8-759-821-45	IC LA1851N							
IC81	8-759-820-91	IC LC7218							
L1	1-410-645-31	MICRO INDUCTOR 100UH							
L2	1-410-645-31	(WG,IT)...MICRO INDUCTOR 100UH							
L21	1-407-500-00	MICRO INDUCTOR 4.7UH							
L61	1-410-525-11	MICRO INDUCTOR 220UH							
LPF21	1-235-164-00	FILTER, LOW PASS							
LPF22	1-235-164-00	FILTER, LOW PASS							

TUNER SECTION

Ref.No.	Part No.	Description
Q1	8-729-230-99	TRANSISTOR 2SC2669-0Y
Q2	8-729-230-99	TRANSISTOR 2SC2669-0Y
Q3	8-729-230-99	(WG,IT)...TRANSISTOR 2SC2669-0Y
Q4	8-729-230-99	(WG,IT)...TRANSISTOR 2SC2669-0Y
Q21	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q22	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q23	8-729-900-61	TRANSISTOR DTA114ES
Q24	8-729-900-80	TRANSISTOR DTC114ES
Q26	8-729-900-80	TRANSISTOR DTC114ES
Q61	8-729-900-80	TRANSISTOR DTC114ES
Q62	8-729-900-80	TRANSISTOR DTC114ES
Q63	8-729-900-80	TRANSISTOR DTC114ES
Q64	8-729-820-24	TRANSISTOR 2SC3330-T
Q65	8-729-821-04	TRANSISTOR 2SA1317-STU
Q66	8-729-900-80	TRANSISTOR DTC114ES
Q81	8-729-900-61	TRANSISTOR DTA114ES
Q82	8-729-900-80	TRANSISTOR DTC114ES
Q83	8-729-202-67	TRANSISTOR 2SK246-GR3
Q84	8-729-107-84	TRANSISTOR 2SC3113A
Q85	8-729-202-67	TRANSISTOR 2SK246-GR3
Q86	8-729-107-84	TRANSISTOR 2SC3113A
R1	△.1-249-397-11	(WG,IT)...CARBON (SMALL)22 5% 1/4W F
R1	△.1-249-401-11	(AEP,UK)...CARBON (SMALL)47 5% 1/4W F
R3	1-249-329-11	CARBON MELF 330 5% 1/8W
R4	1-249-329-11	CARBON MELF 330 5% 1/8W
R5	1-249-329-11	CARBON MELF 330 5% 1/8W
R6	1-249-350-11	CARBON MELF 18K 5% 1/8W
R7	1-249-329-11	CARBON MELF 330 5% 1/8W
R8	1-249-332-11	CARBON MELF 560 5% 1/8W
R9	1-249-352-11	CARBON MELF 27K 5% 1/8W
R10	1-249-329-11	(WG,IT)...CARBON MELF 330 5% 1/8W
R11	1-249-350-11	(WG,IT)...CARBON MELF 18K 5% 1/8W
R12	1-249-329-11	(WG,IT)...CARBON MELF 330 5% 1/8W
R13	1-249-334-11	(WG,IT)...CARBON MELF 820 5% 1/8W
R14	1-249-352-11	(WG,IT)...CARBON MELF 27K 5% 1/8W
R15	1-249-347-11	(WG,IT)...CARBON MELF 10K 5% 1/8W
R16	1-249-343-11	(WG,IT)...CARBON MELF 4.7K 5% 1/8W
R21	△.1-249-404-00	CARBON (SMALL)82 5% 1/4W F
R22	△.1-249-430-11	CARBON (SMALL)12K 5% 1/4W F
R23	1-249-335-11	CARBON MELF 1K 5% 1/8W
R24	1-249-353-11	CARBON MELF 33K 5% 1/8W
R25	1-249-346-11	CARBON MELF 8.2K 5% 1/8W
R26	1-249-340-11	(WG,IT)...CARBON MELF 2.7K 5% 1/8W
R27	△.1-249-432-11	CARBON (SMALL)18K 5% 1/4W F
R29	1-249-347-11	CARBON MELF 10K 5% 1/8W
R31	1-249-331-11	CARBON MELF 470 5% 1/8W
R32	1-249-347-11	CARBON MELF 10K 5% 1/8W
R33	1-249-347-11	CARBON MELF 10K 5% 1/8W
R34	△.1-249-437-11	CARBON (SMALL)47K 5% 1/4W F
R35	1-249-355-11	CARBON MELF 47K 5% 1/8W
R37	1-249-359-11	CARBON MELF 100K 5% 1/8W
R38	1-249-363-11	CARBON MELF 220K 5% 1/8W
R39	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R40	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R41	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R42	1-249-359-11	CARBON MELF 100K 5% 1/8W
R43	1-249-363-11	CARBON MELF 220K 5% 1/8W
R44	1-249-339-11	CARBON MELF 2.2K 5% 1/8W

Ref.No.	Part No.	Description
R45	1-249-338-11	CARBON MELF 1.8K 5% 1/8W
R46	1-249-344-11	CARBON MELF 5.6K 5% 1/8W
R47	△.1-249-409-11	CARBON (SMALL)220 5% 1/4W F
R61	1-249-359-11	CARBON MELF 100K 5% 1/8W
R62	1-249-355-11	CARBON MELF 47K 5% 1/8W
R64	1-249-351-11	CARBON MELF 22K 5% 1/8W
R65	1-249-355-11	CARBON MELF 47K 5% 1/8W
R66	1-215-493-00	CARBON MELF 1M 5% 1/5W
R67	1-249-359-11	CARBON MELF 100K 5% 1/8W
R68	1-249-352-11	CARBON MELF 27K 5% 1/8W
R69	1-249-351-11	CARBON MELF 22K 5% 1/8W
R70	1-249-331-11	CARBON MELF 470 5% 1/8W
R71	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R72	1-249-351-11	CARBON MELF 22K 5% 1/8W
R73	1-249-347-11	CARBON MELF 10K 5% 1/8W
R74	1-249-347-11	CARBON MELF 10K 5% 1/8W
R75	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R81	1-249-335-11	CARBON MELF 1K 5% 1/8W
R82	1-249-335-11	CARBON MELF 1K 5% 1/8W
R83	1-249-335-11	CARBON MELF 1K 5% 1/8W
R84	1-249-335-11	CARBON MELF 1K 5% 1/8W
R85	1-249-347-11	CARBON MELF 10K 5% 1/8W
R86	1-249-335-11	CARBON MELF 1K 5% 1/8W
R87	1-249-347-11	CARBON MELF 10K 5% 1/8W
R88	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R89	1-249-335-11	CARBON MELF 1K 5% 1/8W
R90	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R91	1-249-335-11	CARBON MELF 1K 5% 1/8W
R92	△.1-249-401-11	CARBON (SMALL)47 5% 1/4W F
R101	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R102	1-249-332-11	CARBON MELF 560 5% 1/8W
R103	1-249-335-11	CARBON MELF 1K 5% 1/8W
R104	1-249-328-11	CARBON MELF 270 5% 1/8W
R105	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R106	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R107	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R108	1-249-323-11	CARBON MELF 100 5% 1/8W
R109	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R110	△.1-249-405-11	CARBON (SMALL)100 5% 1/4W F
R111	1-249-341-11	CARBON MELF 3.3K 5% 1/8W
R112	1-249-332-11	CARBON MELF 560 5% 1/8W
R113	1-249-335-11	CARBON MELF 1K 5% 1/8W
R114	1-249-328-11	CARBON MELF 270 5% 1/8W
R115	1-249-351-11	CARBON MELF 22K 5% 1/8W
R116	1-249-339-11	CARBON MELF 2.2K 5% 1/8W
R117	1-249-343-11	CARBON MELF 4.7K 5% 1/8W
R118	1-249-323-11	CARBON MELF 100 5% 1/8W
RV21	1-238-013-11	(AEP,UK)...RES, ADJ, CARBON 2.2K
RV21	1-238-015-11	(WG,IT)...RES, ADJ, CARBON 4.7K
RV22	1-238-017-11	RES, ADJ, CARBON 22K
RV24	1-238-017-11	(AEP,UK)...RES, ADJ, CARBON 22K
RV24	1-238-019-11	(WG,IT)...RES, ADJ, CARBON 47K
T21	1-404-807-11	TRANSFORMER, DISCRIMINATOR
T23	1-236-465-11	(WG,IT)...ENCAPSULATED COMPONENT
TM1	*1-537-138-31	TERMINAL BOARD (ANT)(ANTENNA)
TP1	*1-560-060-00	PIN, CONNECTOR 2P
XT81	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

EXCEPT TUNER SECTION

Ref.No.	Part No.	Description
902	*A-4334-501-A *A-4334-503-A *A-4334-822-A	(AEP).....MOUNTED PCB, POWER (WG,IT)...MOUNTED PCB, POWER (UK).....MOUNTED PCB, POWER
903	*A-4334-497-A *A-4334-499-A *A-4334-500-A *A-4334-821-A	(AEP)...MOUNTED PCB, PANEL (WG)....MOUNTED PCB, PANEL (IT)....MOUNTED PCB, PANEL (UK)....MOUNTED PCB, PANEL
904	1-575-666-11	WIRE, FLAT TYPE (11 CORE)
C601	1-162-200-31	CERAMIC 11PF 5% 50V
C602	1-162-200-31	CERAMIC 11PF 5% 50V
C603	1-126-094-11	ELECT 4.7MF 20% 25V
C604	1-161-379-00	CERAMIC 0.01MF 30% 16V
C605	1-161-379-00	CERAMIC 0.01MF 30% 16V
C606	1-126-177-11	ELECT 100MF 20% 6.3V
C607	1-123-357-00	ELECT 22MF 20% 35V
C608	1-161-379-00	CERAMIC 0.01MF 30% 16V
C609	1-126-157-11	ELECT 10MF 20% 16V
C701	1-161-379-00	CERAMIC 0.01MF 30% 16V
C702	1-162-284-31	CERAMIC 150PF 10% 50V
C703	1-162-284-31	CERAMIC 150PF 10% 50V
C704	1-123-875-11	ELECT 10MF 20% 50V
C705	1-161-379-00	CERAMIC 0.01MF 30% 16V
C801	1-161-744-00	CERAMIC 0.01MF 400V
C802	1-101-004-00	CERAMIC 0.01MF 50V
C803	1-101-004-00	CERAMIC 0.01MF 50V
C804	1-126-105-11	ELECT 1000MF 20% 35V
C805	1-161-379-00	CERAMIC 0.01MF 30% 16V
C806	1-124-477-11	ELECT 47MF 20% 16V
C807	1-124-477-11	ELECT 47MF 20% 16V
C808	1-124-927-11	ELECT 4.7MF 20% 50V
C809	1-161-379-00	CERAMIC 0.01MF 30% 16V
C810	1-124-918-11	ELECT 47MF 20% 63V
C811	1-124-918-11	ELECT 47MF 20% 63V
C812	1-124-910-11	ELECT 47MF 20% 50V
C813	1-123-875-11	ELECT 10MF 20% 50V
CN601	*1-568-854-11	SOCKET, CONNECTOR 11P
CN602	*1-568-273-11	SOCKET, CONNECTOR 7P
CN701	*1-569-625-11	SOCKET, CONNECTOR 3P(SYSTEM CONTROL 2)
CN801	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P
CN802	*1-568-308-11	SOCKET, CONNECTOR 4P
CN803	*1-568-830-11	SOCKET, CONNECTOR 11P
CN804	*1-564-321-00	PIN, CONNECTOR 2P
CN901	*1-569-625-11	SOCKET, CONNECTOR 3P(SYSTEM CONTROL 1)
CN902	1-568-269-11	SOCKET, CONNECTOR 3P

Ref.No.	Part No.	Description
CNJ801	1-526-751-00	(UK).....OUTLET, AC
CNJ801	1-526-794-11	(AEP,WG,IT)...OUTLET, AC
CNJ802	1-526-751-00	(UK).....OUTLET, AC
CNJ802	1-526-794-11	(AEP,WG,IT)...OUTLET, AC
CNP801	1-575-651-11	(AEP,WG,IT)...CORD, POWER
CNP801	1-575-652-11	(UK).....CORD, POWER
D601	8-719-912-20	DIODE 1SS120
D602	8-719-912-20	DIODE 1SS120
D603	8-719-912-20	DIODE 1SS120
D604	8-719-912-20	DIODE 1SS120
D605	8-719-912-20	(IT)...DIODE 1SS120
D609	8-719-912-20	DIODE 1SS120
D612	8-719-912-20	DIODE 1SS120
D613	8-719-912-20	DIODE 1SS120
D614	8-719-912-20	DIODE 1SS120
D615	8-719-912-20	DIODE 1SS120
D616	8-719-912-20	DIODE 1SS120
D617	8-719-912-20	DIODE 1SS120
D618	8-719-912-20	DIODE 1SS120
D701	8-719-912-20	DIODE 1SS120
D702	8-719-912-20	DIODE 1SS120
D801	8-719-912-20	DIODE 1SS120
D802	8-719-200-77	DIODE 10E2N
D803	8-719-200-77	DIODE 10E2N
D804	8-719-200-77	DIODE 10E2N
D805	8-719-200-77	DIODE 10E2N
D806	8-719-934-22	DIODE HZS30-2L
D807	8-719-014-66	DIODE UZP-5.6B
F801	1-532-286-00	FUSE, TIME-LAG (2.5A)
FH801	1-533-213-31	HOLDER, FUSE
FH802	1-533-213-31	HOLDER, FUSE
FL601	1-519-595-11	INDICATOR TUBE, FLUORESCENT
IC601	8-759-239-54	IC TMP47C87ON-4661
IC602	8-749-920-83	IC GP1U52XB
IC701	8-759-634-73	IC M50760-141P
IC801	8-759-820-09	IC LA5667
L601	1-410-521-11	INDUCTOR 100UH
L701	1-410-521-11	INDUCTOR 100UH
PT801	1-449-979-11	TRANSFORMER, POWER
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF
Q702	8-729-620-05	TRANSISTOR 2SC2603-EF
Q703	8-729-900-80	TRANSISTOR DTC114ES

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.



EXCEPT TUNER SECTION

Ref.No.	Part No.	Description			
Q801	8-729-140-04	TRANSISTOR 2SB1116A-L			
Q802	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q803	8-729-140-04	TRANSISTOR 2SB1116A-L			
R601	1-249-441-11	CARBON	100K	5%	1/4W
R602	1-249-425-11	CARBON	4.7K	5%	1/4W
R603	1-249-441-11	CARBON	100K	5%	1/4W
R604	1-249-441-11	CARBON	100K	5%	1/4W
R605	1-249-429-11	CARBON	10K	5%	1/4W
R606	1-249-429-11	CARBON	10K	5%	1/4W
R607	1-249-429-11	CARBON	10K	5%	1/4W
R608	1-249-429-11	CARBON	10K	5%	1/4W
R609	1-249-429-11	CARBON	10K	5%	1/4W
R610	1-249-429-11	CARBON	10K	5%	1/4W
R611	1-249-429-11	CARBON	10K	5%	1/4W
R612	1-249-429-11	CARBON	10K	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-423-11	CARBON	3.3K	5%	1/4W
R617	1-249-429-11	CARBON	10K	5%	1/4W
R618	1-249-429-11	CARBON	10K	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W
R623	1-249-405-11	CARBON	100	5%	1/4W
R624	1-249-417-11	CARBON	1K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
R626	1-249-433-11	CARBON	22K	5%	1/4W
R701	1-249-425-11	CARBON	4.7K	5%	1/4W
R702	1-249-429-11	CARBON	10K	5%	1/4W
R703	1-249-393-11	CARBON	10	5%	1/4W
R704	1-249-425-11	CARBON	4.7K	5%	1/4W
R705	1-249-429-11	CARBON	10K	5%	1/4W
R706	1-249-393-11	CARBON	10	5%	1/4W
R707	1-247-903-00	CARBON	1M	5%	1/4W
R708	1-249-429-11	CARBON	10K	5%	1/4W
R709	1-249-429-11	CARBON	10K	5%	1/4W
R710	1-249-429-11	CARBON	10K	5%	1/4W
R801	1-247-743-11	CARBON	220	5%	1/2W
R802	1-249-429-11	CARBON	10K	5%	1/4W
R803	1-249-425-11	CARBON	4.7K	5%	1/4W
R804	1-249-425-11	CARBON	4.7K	5%	1/4W
R805	1-249-417-11	CARBON	1K	5%	1/4W
R806	1-249-433-11	CARBON	22K	5%	1/4W

Ref.No.	Part No.	Description			
R807	1-247-702-11	CARBON	150	5%	1/4W F
R808	1-249-425-11	CARBON	4.7K	5%	1/4W
R809	1-249-437-11	CARBON	47K	5%	1/4W
RY801	1-515-720-11	RELAY			
S601	1-554-303-21	SWITCH, KEY BOARD (1)			
S602	1-554-303-21	SWITCH, KEY BOARD (2)			
S603	1-554-303-21	SWITCH, KEY BOARD (3)			
S604	1-554-303-21	SWITCH, KEY BOARD (4)			
S605	1-554-303-21	SWITCH, KEY BOARD (5)			
S606	1-554-303-21	SWITCH, KEY BOARD (6)			
S607	1-554-303-21	SWITCH, KEY BOARD (7)			
S608	1-554-303-21	SWITCH, KEY BOARD (8)			
S609	1-554-303-21	SWITCH, KEY BOARD (9)			
S610	1-554-303-21	SWITCH, KEY BOARD (10)			
S611	1-554-303-21	SWITCH, KEY BOARD (A.SHIFT)			
S612	1-554-303-21	SWITCH, KEY BOARD (B.SHIFT)			
S613	1-554-303-21	SWITCH, KEY BOARD (C.SHIFT)			
S614	1-554-303-21	SWITCH, KEY BOARD (+.TUNING)			
S615	1-554-303-21	SWITCH, KEY BOARD (-.TUNING)			
S616	1-554-303-21	SWITCH, KEY BOARD (BAND)			
S617	1-554-303-21	SWITCH, KEY BOARD (MEMORY)			
S618	1-554-303-21	SWITCH, KEY BOARD (MEMORY SCAN)			
S619	1-554-303-21	SWITCH, KEY BOARD (AUTO)			
S620	1-554-303-21	SWITCH, KEY BOARD (ONECE)			
S621	1-554-303-21	SWITCH, KEY BOARD (DAILY)			
S622	1-554-303-21	SWITCH, KEY BOARD (NEXT)			
S623	1-554-303-21	SWITCH, KEY BOARD (+.TIME)			
S624	1-554-303-21	SWITCH, KEY BOARD (-.TIME)			
S625	1-554-303-21	SWITCH, KEY BOARD (CLOSE)			
S626	1-554-303-21	SWITCH, KEY BOARD (SLEEP)			
S627	1-554-303-21	SWITCH, KEY BOARD (CONTROL)			
S628	1-554-303-21	SWITCH, KEY BOARD (CLEAR)			
S629	1-554-303-21	SWITCH, KEY BOARD (BACK)			
S630	1-554-303-21	SWITCH, KEY BOARD (POWER)			
S631	1-554-303-21	SWITCH, KEY BOARD (FREQUENCY/TIME)			
S632	1-554-303-21	SWITCH, KEY BOARD (MODE)			
X601	1-567-821-21	VIBRATOR, CRYSTAL (4.194304MHz)			
X701	1-578-699-11	OSCILLATOR, CERAMIC (800kHz)			

ACCESSORY & PACKING MATERIAL

4-920-940-01	SHEET (A), PROTECTION
*4-934-860-01	CUSHION

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

SS-A502

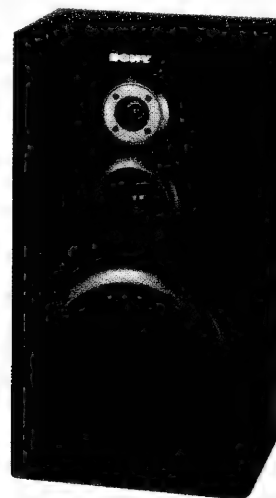
SERVICE MANUAL

SPECIFICATIONS

Speaker system	3-way speaker system
Speaker units	Woofer: 16 cm, cone type Midrange: 6 cm, cone type Tweeter: 1.6 cm, dome type
Enclosure type	Acoustic suspension
Nominal impedance	6 ohms
Power handling capacity	Music 120 W
Sensitivity	88 dB (1 W, 1 m), 6.3 W (96 dB, 1 m)
Frequency range	45 Hz to 20,000 Hz
Dimensions	Approx. 250 x 461 x 196 mm (w/h/d)
Weight	Approx. 4.7 kg per speaker, net Approx. 10 kg in shipping carton

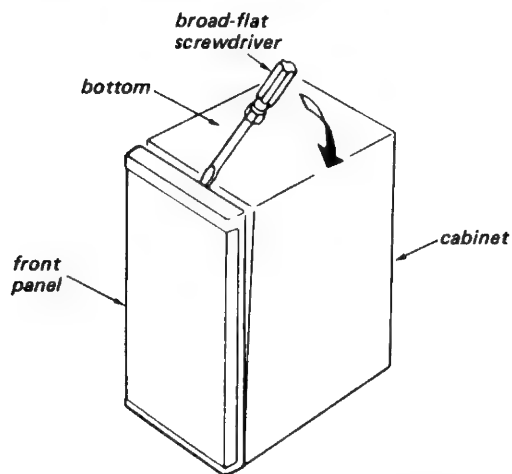
Design and specifications subject to change without notice.

AEP Model
UK Model



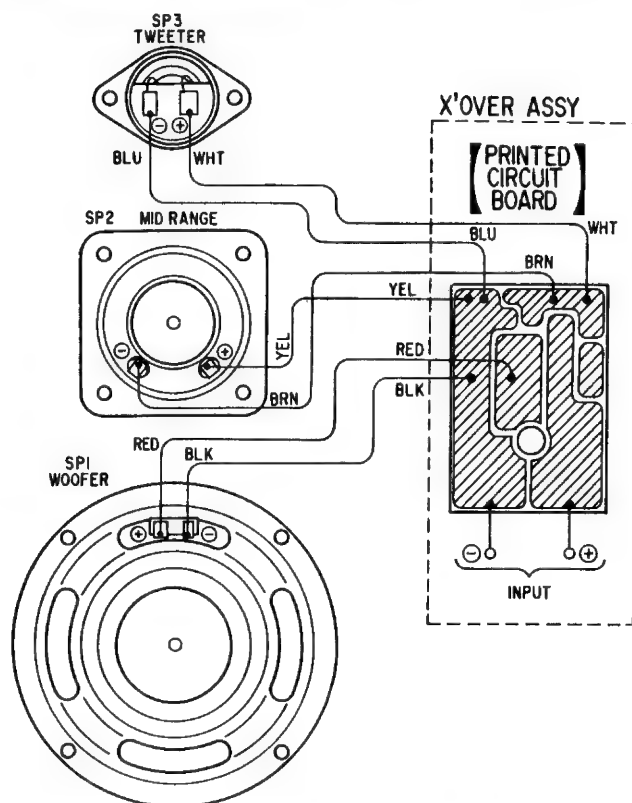
This set is the speaker system in LBT-V502.

1. FRONT PANEL REMOVAL



Note: Be careful not to scratch the cabinet.

2. WIRING DIAGRAM



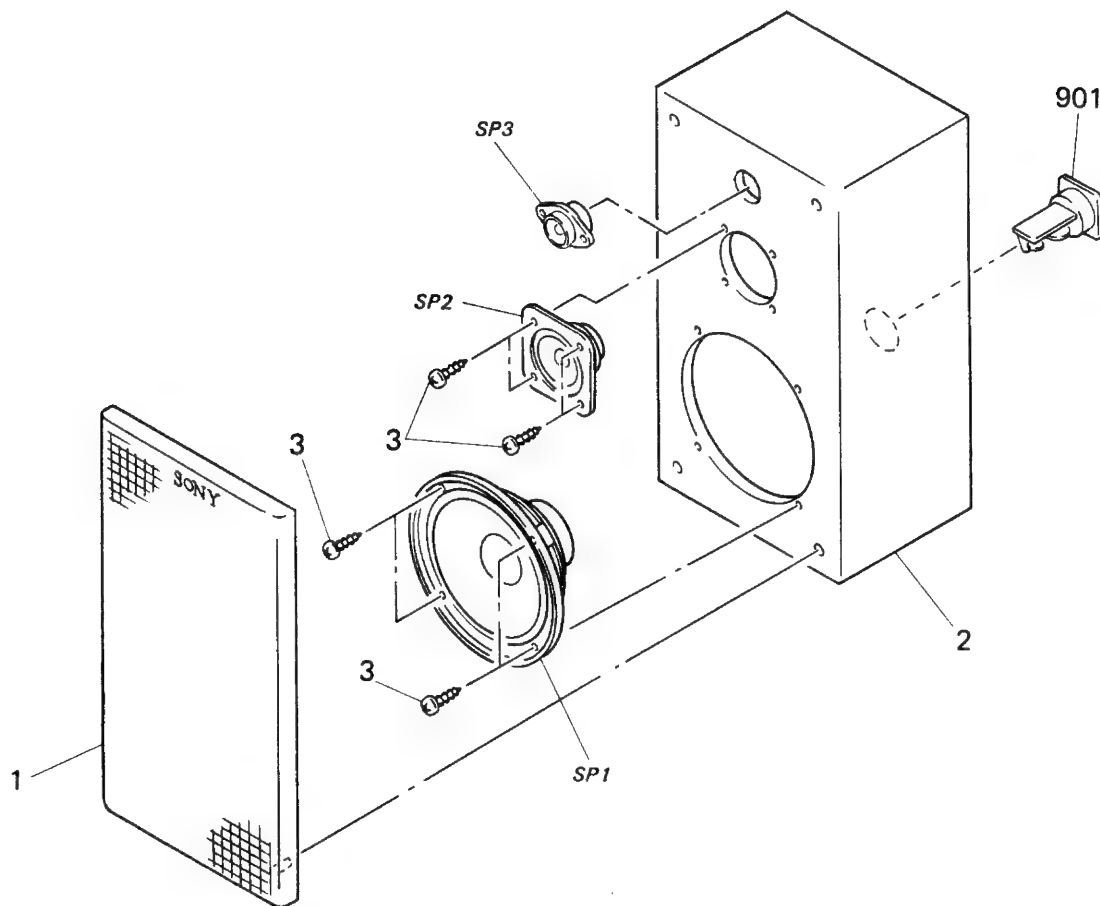
SPEAKER SYSTEM
SONY®



3. EXPLODED VIEW AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.



No.	Part No.	Description
1	T-8150-366-A (AEP)...	PANEL ASSY, FRONT
	T-8150-373-A (UK)....	PANEL ASSY, FRONT
2	T-8151-231-1 (AEP)...	SPEAKER BOX
	T-8151-233-1 (UK)....	SPEAKER BOX
3	T-8150-573-1	TAPPING SCREW +P 4X15

ACCESSORY & PACKING MATERIAL

T-8151-236-1 (AEP)...	MANUAL, INSTRUCTION
T-8151-195-1 (UK)....	MANUAL, INSTRUCTION

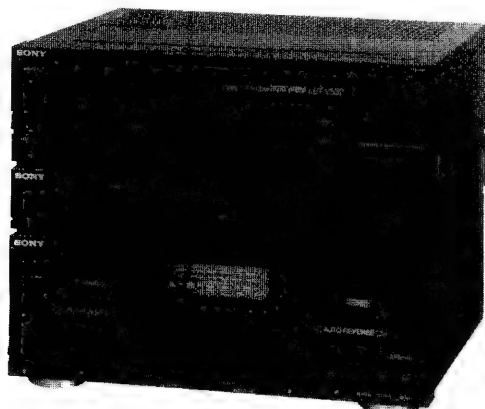
ELECTRICAL PARTS

Ref.No.	Part No.	Description
901	T-8150-376-A (AEP)...	X'OVER ASSY
	T-8150-374-A (UK)....	X'OVER ASSY
C 1	T-8110-253-1	CAP 2.2MF 50V
SP1	T-8110-443-1	WOOFER
SP2	1-544-046-11	MID RANGE
SP3	1-544-135-21	TWEETER

DXA-V502

SERVICE MANUAL

*AEP Model
UK Model
E Model
Australian Model*



DXA-V502 is the deck amplifier section
in LBT-V502/V502CD/V502CDM.

Model Name Using Similar Mechanism	HST-D501	
Tape Transport Mechanism Type	DECK A	TCM-170A1
	DECK B	TCM-170B1

SPECIFICATIONS

Amplifier

Continuous RMS power output

60 W + 60 W (6 ohms, at 1 kHz, 0.7% THD)

Music power output 100 W + 100 W (6 ohms, at 1 kHz, 10% THD)

Input	Jack type	Sensitivity	Impedance
PHONO IN	Phono	2 mV	47 kohms
VIDEO/DAT IN	Phono	200 mV	47 kohms
CD IN	Phono	200 mV	47 kohms

Output	Jack type	Impedance
SURROUND SPEAKER	Phono	Accepts speakers of 8 to 16 ohms
HEAD- PHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response CD: 15 Hz to 50 kHz ± 3 dB

Cassette deck

Recording system

4-track 2-channel stereo

Frequency response

DOLBY NR OFF

With Type II cassette (Sony UX-S)

40 Hz to 14 kHz (± 3 dB)

With Type I cassette (Sony HF-S)

40 Hz to 13 kHz (± 3 dB)

Wow and flutter

0.1% (WRMS)

General

Power requirements

AEP, Italian Models : 220V AC, 50Hz

UK Model : 240V AC, 50Hz

E, Saudi Arabia, Australian Models: 110, 120, 220, 240V AC,
50/60Hz

Power consumption

230W

Weight


Approx. 8 kg

Dimensions

Approx. 355 × 288 × 319 mm
(w/h/d, including projections)

Design and specifications subject to change without notice.

Dolby noise reduction manufactured under license from
Dolby Laboratories Licensing Corporation.

"DOLBY" and the double-D symbol  are trademarks of
Dolby Laboratories Licensing Corporation.



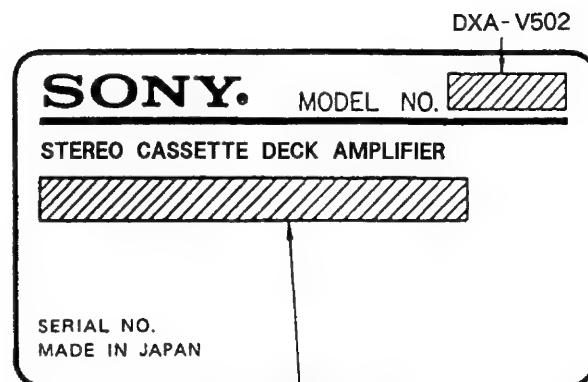
STEREO CASSETTE DECK AMPLIFIER
SONY®

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	Specifications	1
	Model Identification	2
1. GENERAL		
	Location and Function of Parts and Controls...	3
2. ADJUSTMENTS		
	2-1. Mechanical Adjustments	4
	2-2. Electrical Adjustments	4
3. DIAGRAMS		
	3-1. Semiconductor Lead Layouts	8
	3-2. Circuit Boards Location	9
	3-3. Printed Wiring Boards	10
	3-4. Schematic Diagram	
	(Deck Section)	15
	IC Block Diagram	20
	3-5. Schematic Diagram	
	(Amplifier Section)	21
4. EXPLODED VIEWS		
	4-1. Overall Section	25
	4-2. Front Panel Section	26
	4-3. Mechanism Section (1)	27
	4-4. Mechanism Section (2)	28
5. ELECTRICAL PARTS LIST		29

MODEL IDENTIFICATION

— Specification Labels —



AEP, West Germany, Italian Models : AC:220V~50/60Hz
 UK Model : AC:240V~50/60Hz
 E, Saudi Arabia, Australian Models : AC:110/120/220/
 240V~50/60Hz
 150W

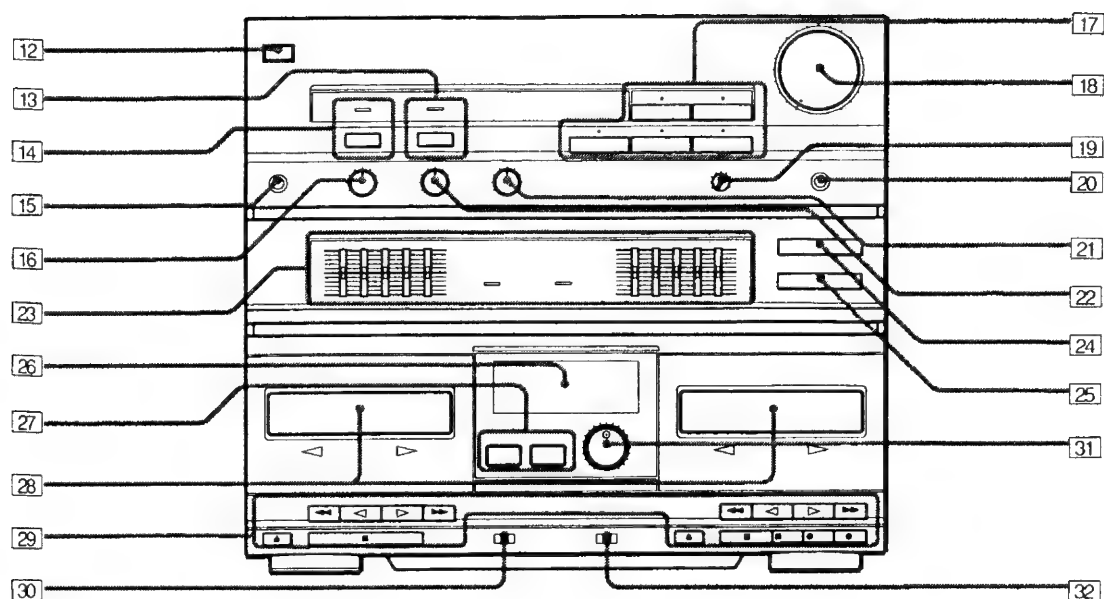
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1

GENERAL

LOCATION AND FUNCTION OF PARTS AND CONTROLS



Amplifier

- 12 POWER switch
- 13 SURROUND switch and indicator
- 14 DBFB (SAT*) switch and indicator
- 15 HEADPHONES jack
- 16 DBFB (SAT*) LEVEL control
- 17 Function selectors and indicators
- 18 VOLUME control
- 19 MIC (microphone) LEVEL control
- 20 MIC (microphone) jack
- 21 BALANCE control
- 22 SURROUND LEVEL control

Equalizer

- 23 GRAPHIC EQUALIZER controls and indicators
- 24 SOUND EFFECT switch
- 25 EFFECT REC switch

Cassette deck

- 26 Display
- 27 SYNCHRO DUBBING buttons
- 28 Cassette holders
- 29 Tape operation buttons
 - ◀◀: Leftward fast winding
 - ▶▶: Rightward fast winding
 - ◀: Reverse play
 - ▶: Forward play
 - ⏏: Ejection
 - : Stop
 - ⏏: Pause (deck B only)
 - : recording muting (deck B only)
 - : recording (deck B only)
- 30 DIRECTION mode switch
- 31 REC LEVEL control
- 32 DOLBY NR (noise reduction) switch

* E, Saudi Arabia, Australian model

SECTION 2 ADJUSTMENTS

2-1. MECHANICAL ADJUSTMENTS

PRECAUTIONS

- Clean the following parts with a denatured-alcoholmoistened swab:

Record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
- Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.

Torque Measurement

DECK A

DECK B

Mode	Torque Motor	Torque
FWD	CQ-102C	30 – 70 g•cm 0.42 – 0.97 oz•inch
FWD back tension	CQ-102C	2 – 6 g•cm 0.03 – 0.08 oz•inch
FF, REW	CQ-201B	90 – 160 g•cm 1.26 – 2.22 oz•inch
REV	CQ-102RB	30 – 70 g•cm 0.42 – 0.97 oz•inch
REV back tension	CQ-102RB	2 – 6 g•cm 0.03 – 0.08 oz•inch

2-2. ELECTRICAL ADJUSTMENTS

PRECAUTIONS

- The adjustment should be performed in the order given in this service manual.
The adjustments should be performed for both L-CH and R-CH.
- Switches and controls should be set as follows unless otherwise specified.
DOLBY NR switch: OFF
DIRECTION MODE switch: \Rightarrow
Function selector: CD

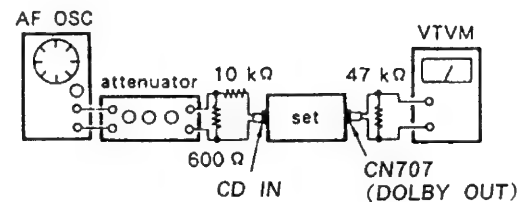
• Test Tape

Type	Signal	User for
P-4-A063	6.3kHz, -10dB	Azimuth Adjustment
P-4-L300	315 Hz, 0 dB	PB Level Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment

• Standard Record:

Deliver the standard input signal level to the CD IN jack and set the REC LEVEL control to obtain the standard output signal level.

— Record Mode —



• Standard Input Level

input terminal	CD IN
source impedance	10 k Ω
input level	61.6mV (-22dB)

• Standard Output Level

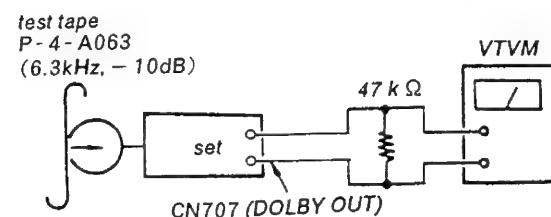
output terminal	CN707 (DOLBY OUT)
load impedance	47 k Ω
output level	56.8mV (-22.7dB)

Record/Playback Head Azimuth Adjustment

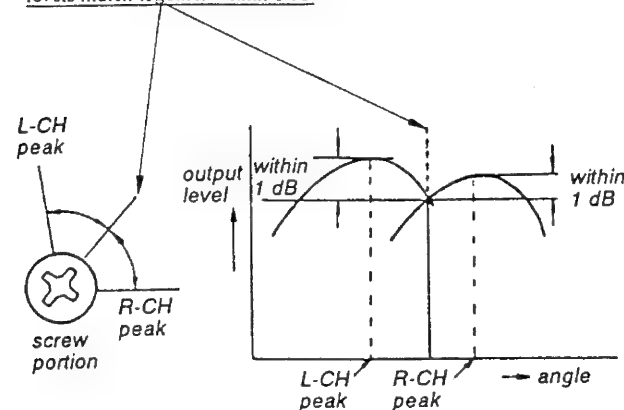
DECK A DECK B

Procedure:

1. Mode: Playback

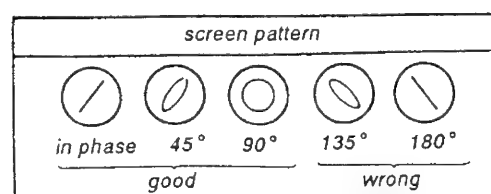
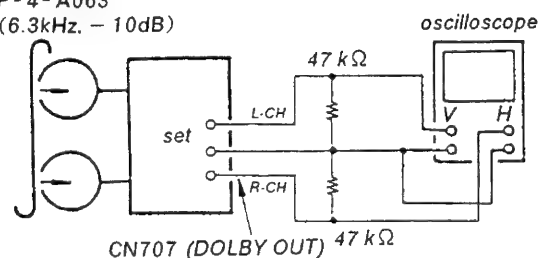


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.



3. Phase Check
Mode: playback

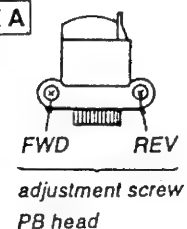
test tape
P-4-A063
(6.3kHz, -10dB)



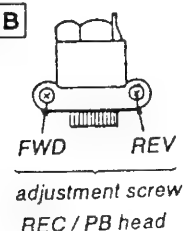
4. Repeat steps 1 - 3 in REV playback mode.
5. After the adjustment, lock the screws with locking compound.

Adjustment Location:

DECK A



DECK B

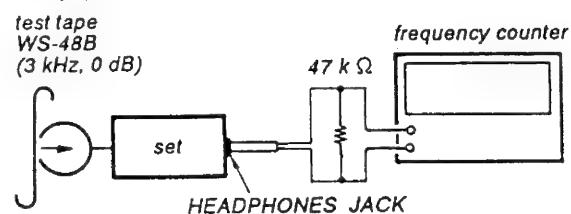


Tape Speed Adjustment

DECK A DECK B

Procedure:

Mode: playback



[High speed adjustment]

1. Short CN707 (TEST) on main board.
2. Put the set to FWD playback state.
3. Press and keep on pressing HIGH SPEED DUBBING button.
4. On this time, adjust with the semi-fixed variable resistors (H) on the rear side of M1 (Deck A) and M2 (Deck B) so that the frequency counter reads $5,960 \pm 60$ Hz.
5. After adjustment, release the short on CN707 (TEST).

[Normal speed adjustment]

1. Put the set to FWD playback state.
2. On this time, adjust with the semi-fixed variable resistors (N) on the rear side of M1 (Deck A) and M2 (DECK B) so that the frequency counter read $2,980 \pm 30$ Hz.

Adjustment Location: M1/M2

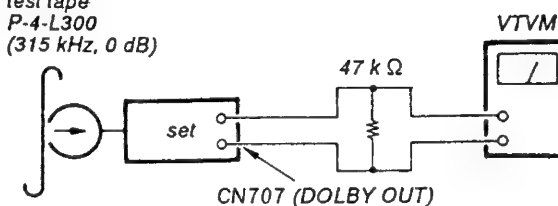
Playback Level Adjustment

DECK A DECK B

Procedure:

Mode: FWD playback

test tape
P-4-L300
(315 kHz, 0 dB)



Adjust Deck A: RV41A (L-CH), RV61A (R-CH) and Deck B: RV41B (L-CH), RV61B (R-CH) so that the VTVM reading becomes the adjustment limits below.

Adjustment Limits:

DOLBY OUT level: -2.7 ± 2 dB (0.46 - 0.71V)
level difference between the channels: within 1.0 dB.

Adjustment Location: MD-A/-B board

Record BIAS Current Adjustment

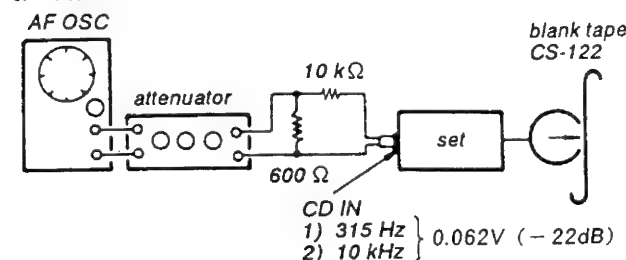
DECK B

Setting:

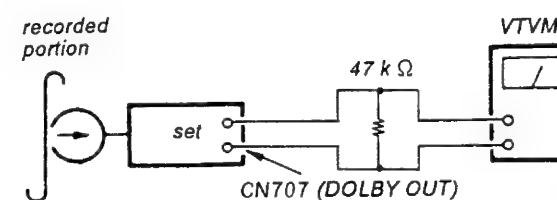
- REC LEVEL control: standard record (See page 4.)
- Short test pin CN707 (TEST) on main board

Procedure:

1. Mode record



2. Mode: playback



Confirm that the 10 kHz playback output is 0 ± 0.5 dB relative to the 315 Hz output. If necessary, adjust RV42 (L-CH), RV62 (R-CH) and repeat the steps given above.

Adjustment Location: MD-A/-B board

Record Level Adjustment

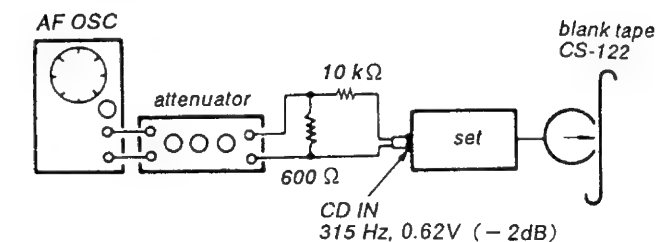
DECK B

Setting:

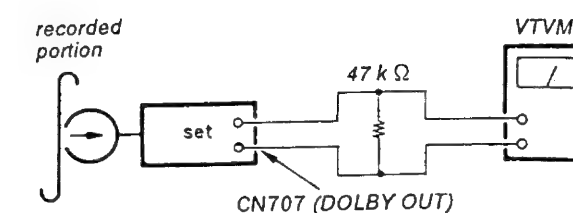
- REC LEVEL control: standard record (See page 4.)
- Short test pin CN707 (TEST) on main board

Procedure:

1. Mode: record



2. Mode: playback



3. Playback the signal recorded in step 1.
Confirm that the signal level is within -2.7 ± 0.5 dB (0.54 - 0.60 V). If necessary, adjust RV501 (L-CH), RV551 (R-CH) and repeat the step 1 - 3.

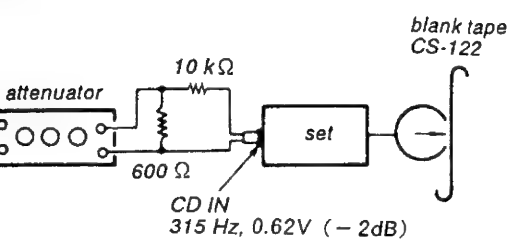
Adjustment Location: main board

SECTION 3 DIAGRAMS

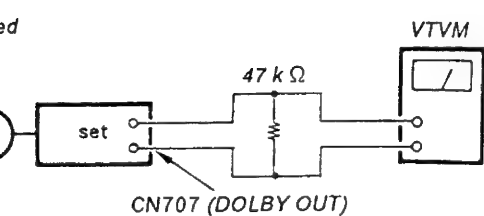
Level Adjustment **DECK B**

LEVEL control: standard record (See page 4.)
test pin CN707 (TEST) on main board

record



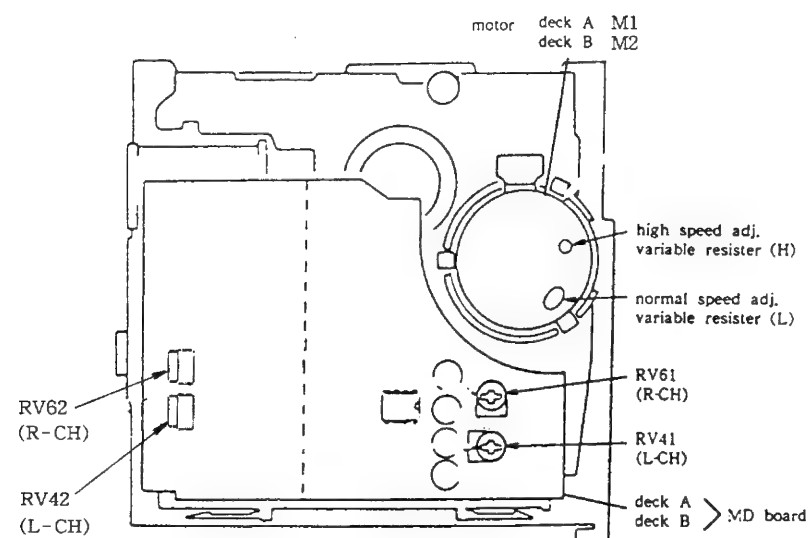
playback



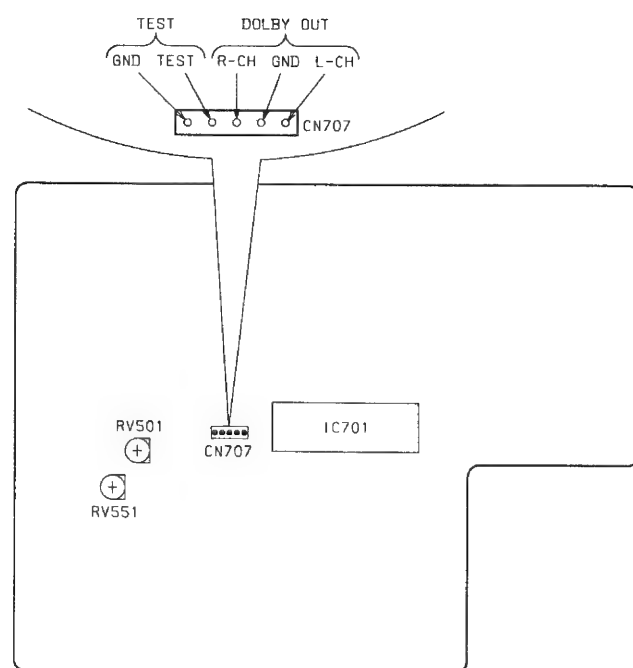
Check the signal recorded in step 1.
If the signal level is within -2.7 ± 0.5 dB (0.54 - 0.60)
If necessary, adjust RV501 (L-CH), RV551 (R-CH) and repeat
steps 1 - 3.

Location: main board

- Adjustment Parts Location Diagrams -



- main board -



3-1. SEMICONDUCTOR LEAD LAYOUTS

2SB1116



2SB1013-4
2SC945-P
2SC1841-PAFAEA
2SD1616A-K
2SD1387



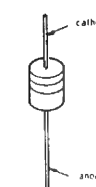
DTA124ES
DTA114ES
DTC114ES
2SC2603-EF
2SC3622A-LK



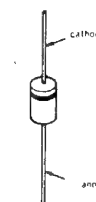
2SA1175-HFE



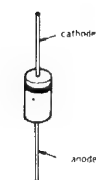
HZS7C2L
HZS6B3L
HZS30-3L
1SS120
1SS202-1
11EQS04



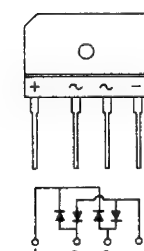
UZP-5.1BB



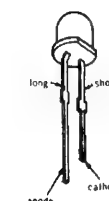
HZ3CLL
10E2N



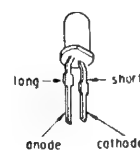
RBV-602-01



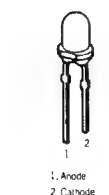
SEL2210S



SEL2410E-D
SEL2910A-D



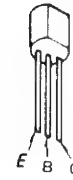
SLP9070



SECTION 3

DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUTS



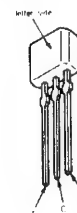
2SB1013-4
2SC945-P
2SC1841-PAFAEA
2SD1616A-K
2SD1387



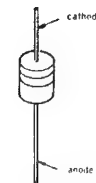
DTA124ES
DTA114ES
DTC114ES
2SC2603- EF
2SC3622A- LK



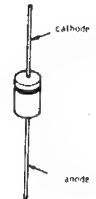
2SA1175-HFE



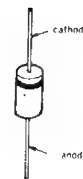
HZS7C2L
HZS6B3L
HZS30-3L
1SS120
1SS202-1
11EQS04



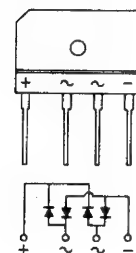
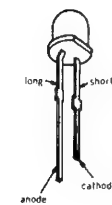
UZP-5.1BB



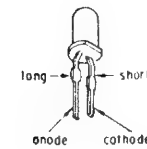
HZ3CLL
10E2N



RBV-602-01

**SEL2210S**

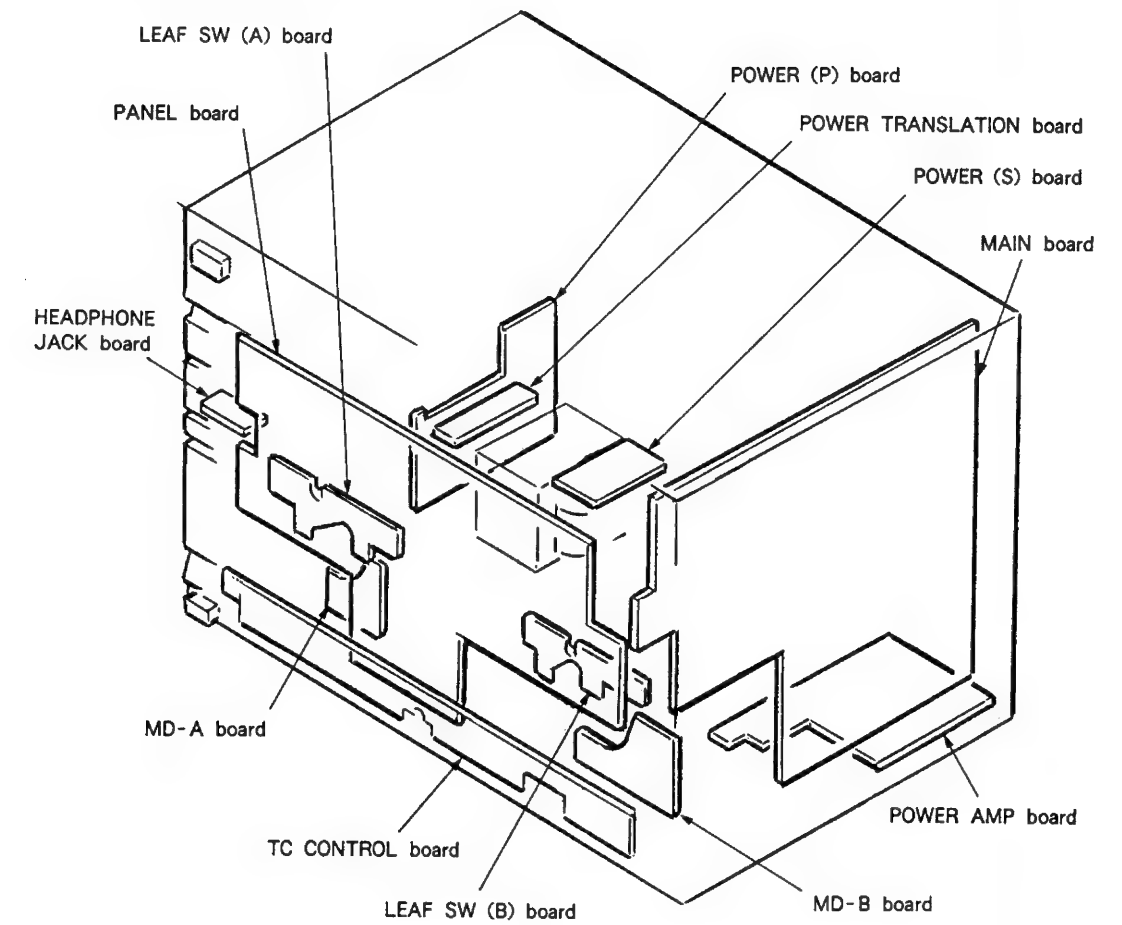
SEL2410E-D
SEL2910A-D



SLP9070



3-2. CIRCUIT BOARDS LOCATION



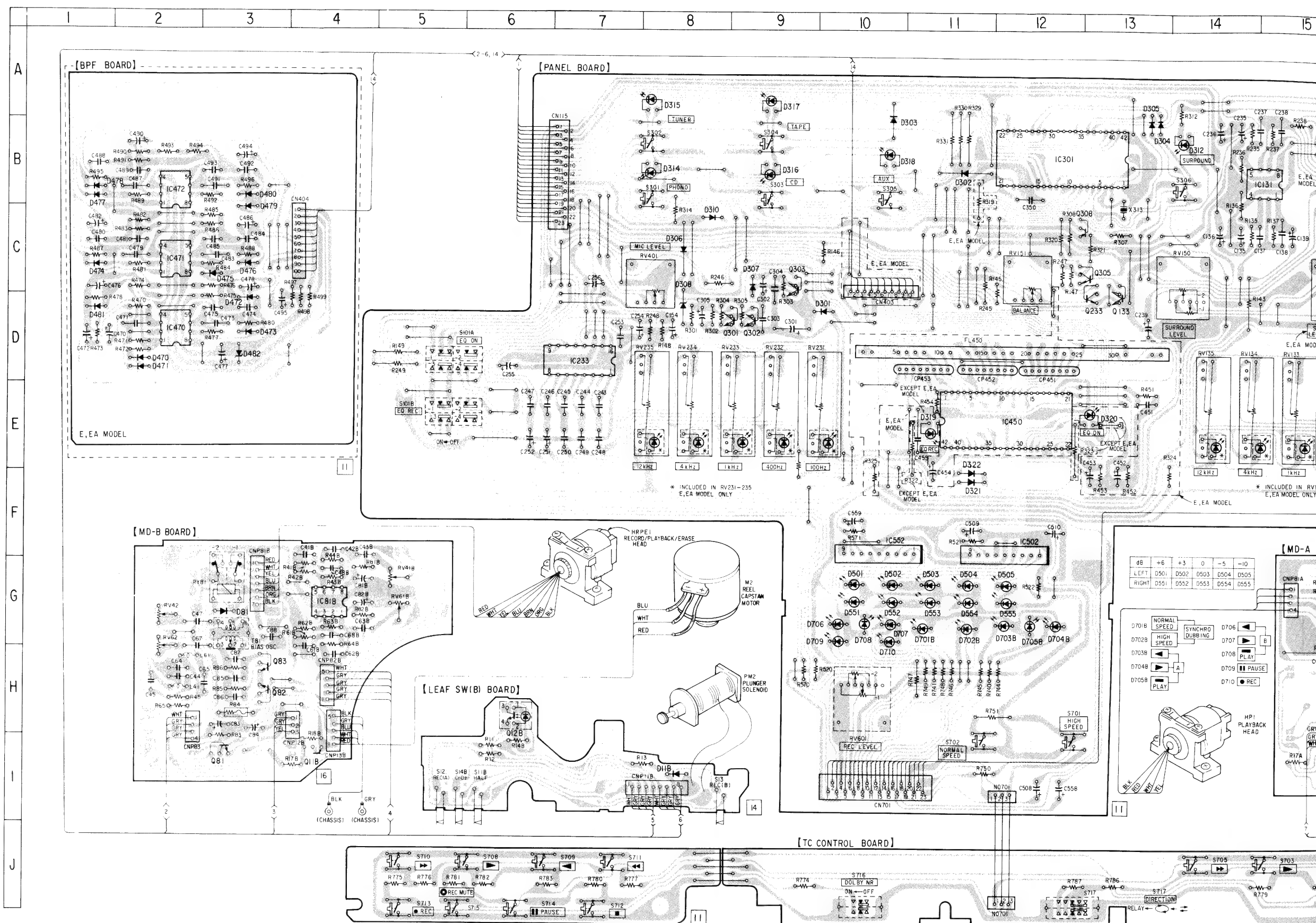
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D11A	I-20	IC101	E-27
D11B	I-8	IC105	B-27
D81	G-3	IC130	B-26
D180	H-31	IC131	B-15
D190	H-32	IC132	B-16
D191	J-29	IC133	D-17
D192	J-29	IC170	H-30
D280	H-31	IC190	J-31
D301	D-10	IC201	D-27
D302	B-11	IC233	D-7
D303	A-10	IC301	B-12
D304	A-14	IC302	B-19
D305	A-13	IC401	D-19
D306	C-8	IC450	E-12
D307	C-9	IC470	D-2
D308	D-8	IC471	C-2
D309	B-20	IC472	B-2
D310	C-8	IC501	B-22
D311	B-16	IC502	F-12
D312	B-14	IC551	B-24
D314	B-8	IC552	F-10
D315	A-8	IC601	G-26
D316	B-9	IC602	H-27
D317	A-9	IC603	D-23
D318	B-10	IC604	B-25
D319	E-11	IC701	E-23
D320	E-13	IC901	D-30
D321	F-11	IC902	E-30
D322	F-11	IC903	D-30
D470	D-2	IC904	H-25
D471	D-2		
D472	D-3	Q11A	I-16
D473	D-3	Q11B	I-4
D474	C-1	Q12A	H-18
D475	C-3	Q12B	H-6
D476	C-3	Q81	I-3
D477	B-1	Q82	H-3
D478	B-1	Q83	H-3
D479	B-3	Q132	C-16
D480	B-3	Q133	C-13
D481	D-1	Q180	H-31
D482	D-3	Q190	H-32
D501	G-10	Q232	B-17
D502	G-10	Q233	C-13
D503	G-11	Q280	H-31
D504	G-11	Q301	D-9
D505	G-12	Q302	D-9
D551	G-10	Q303	C-9
D552	G-10	Q305	C-13
D553	G-11	Q306	B-17
D554	G-11	Q307	A-17
D555	G-12	Q308	C-13
D601	D-23	Q501	B-25
D602	F-24	Q502	F-27
D701A	D-19	Q504	B-23
D701B	G-11	Q551	E-26
D702A	F-19	Q552	F-28
D702B	G-11	Q554	B-23
D703A	E-24	Q601	G-26
D703B	G-12	Q701	E-19
D704A	E-24	Q702	E-19
D704B	G-12	Q703	E-20
D705A	E-25	Q704	F-20
D705B	G-12	Q705	F-19
D706	G-10	Q706	F-20
D707	G-10	Q707	F-22
D708	G-10	Q708	F-22
D709	G-10	Q709	F-24
D710	G-10	Q710	F-25
D901	H-22	Q711	D-21
D902	H-24	Q712	D-21
D903	H-24	Q713	D-21
D904	G-24	Q714	D-20
D905	G-24	Q715	D-20
D906	E-30	Q716	D-20
D907	D-30	Q717	D-20
D908	I-22	Q718	D-20
D909	I-21	Q719	E-24
D910	I-26	Q720	F-24
		Q722	F-24
IC81A	G-16	Q901	I-22
IC81B	G-4		

3-3. PRINTED WIRING BOARDS

• See page 8 for Semiconductor Lead Layouts.

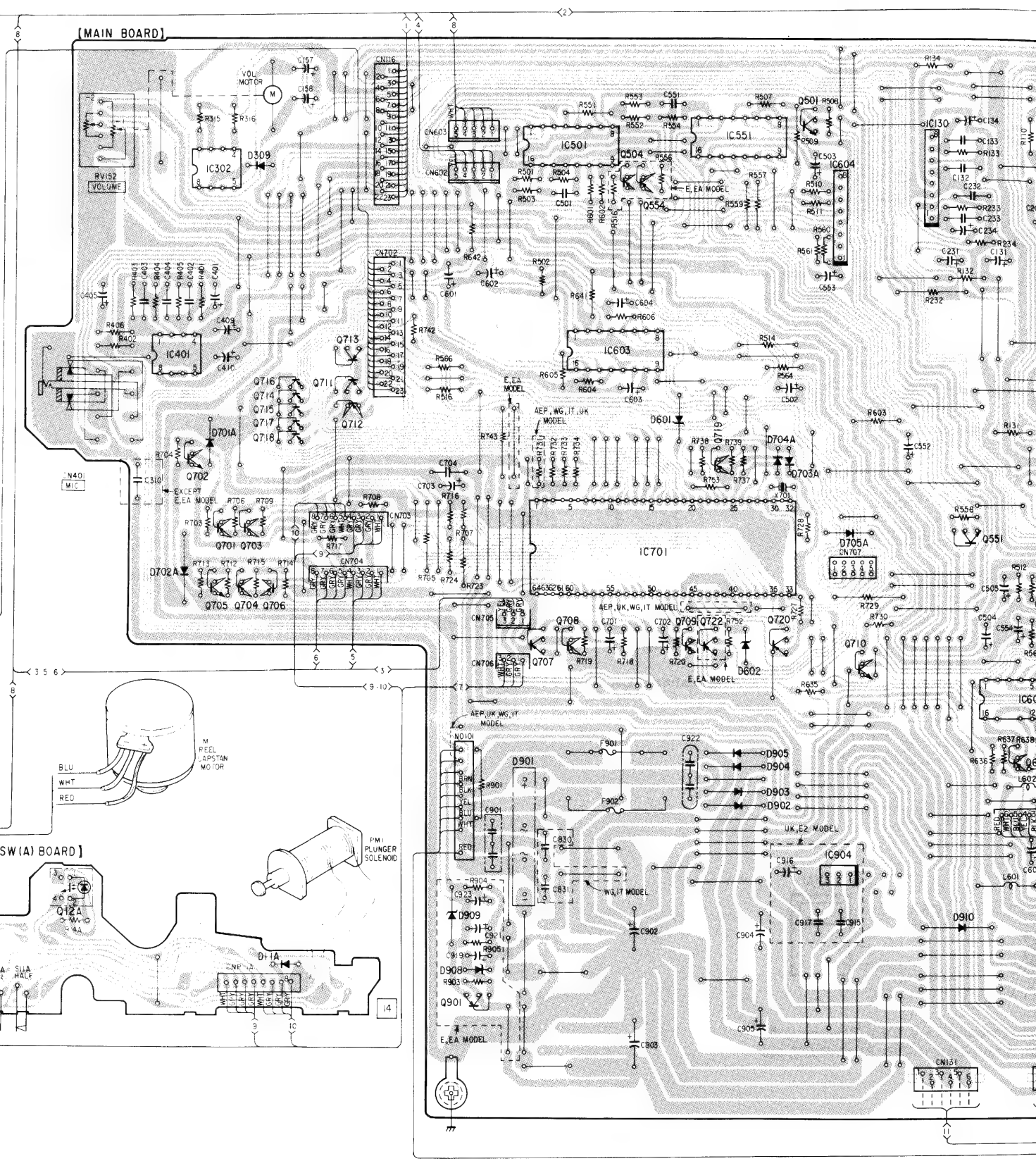
• See page 9 for Circuit Boards Location.

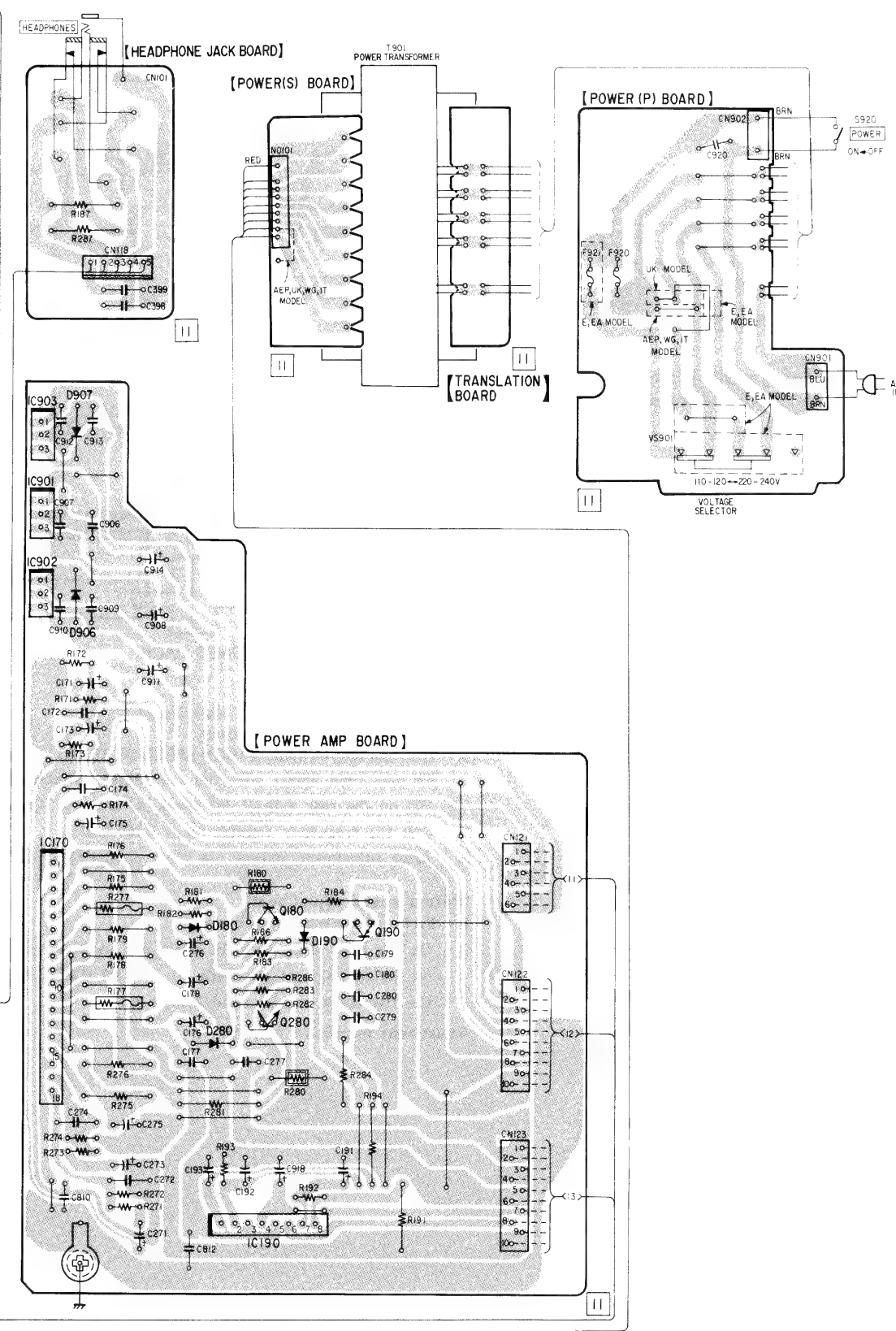
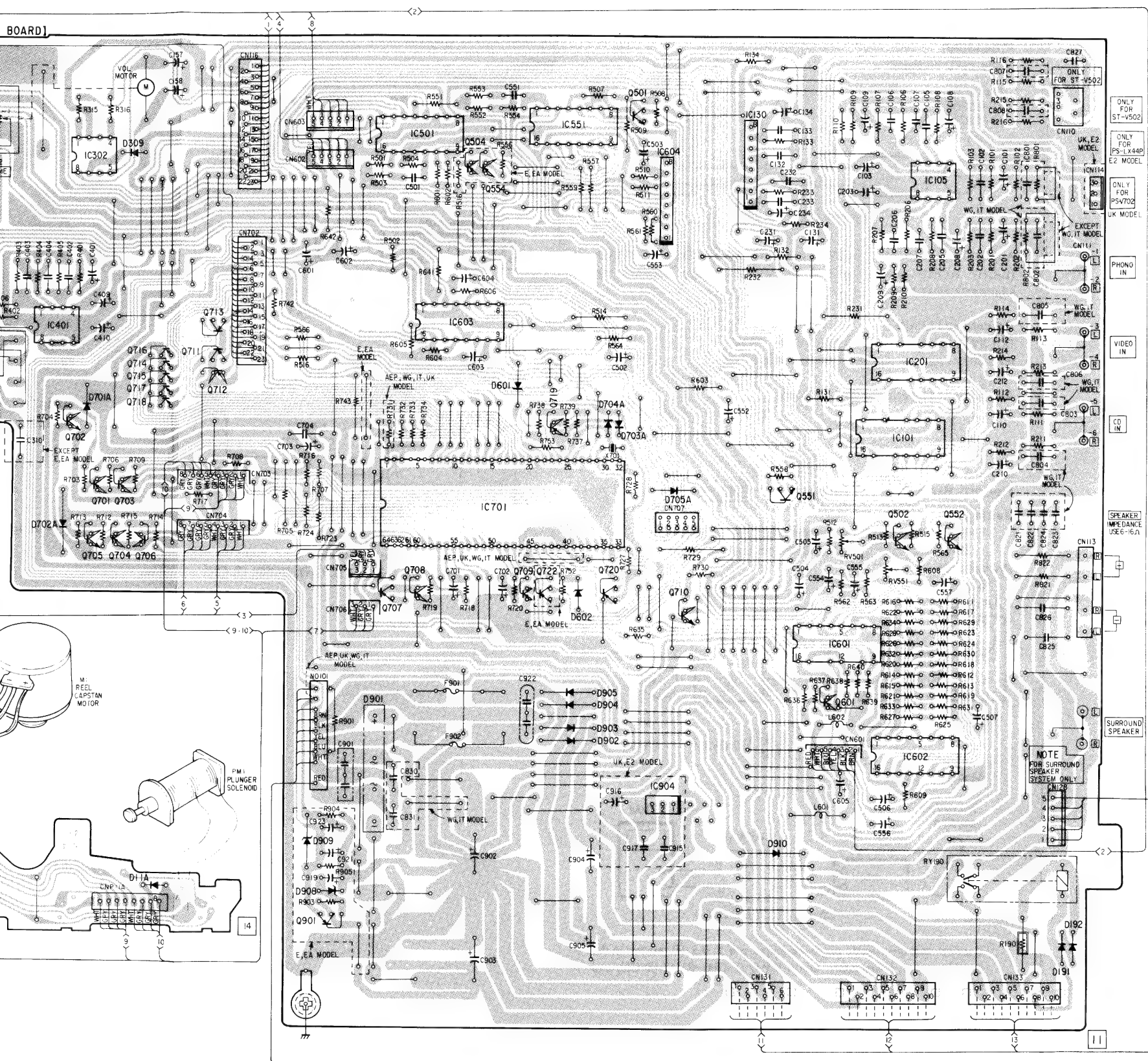


Note on Mounting Diagram:

- — : parts extracted from the component side.
- [] : indicates side identified with part number.

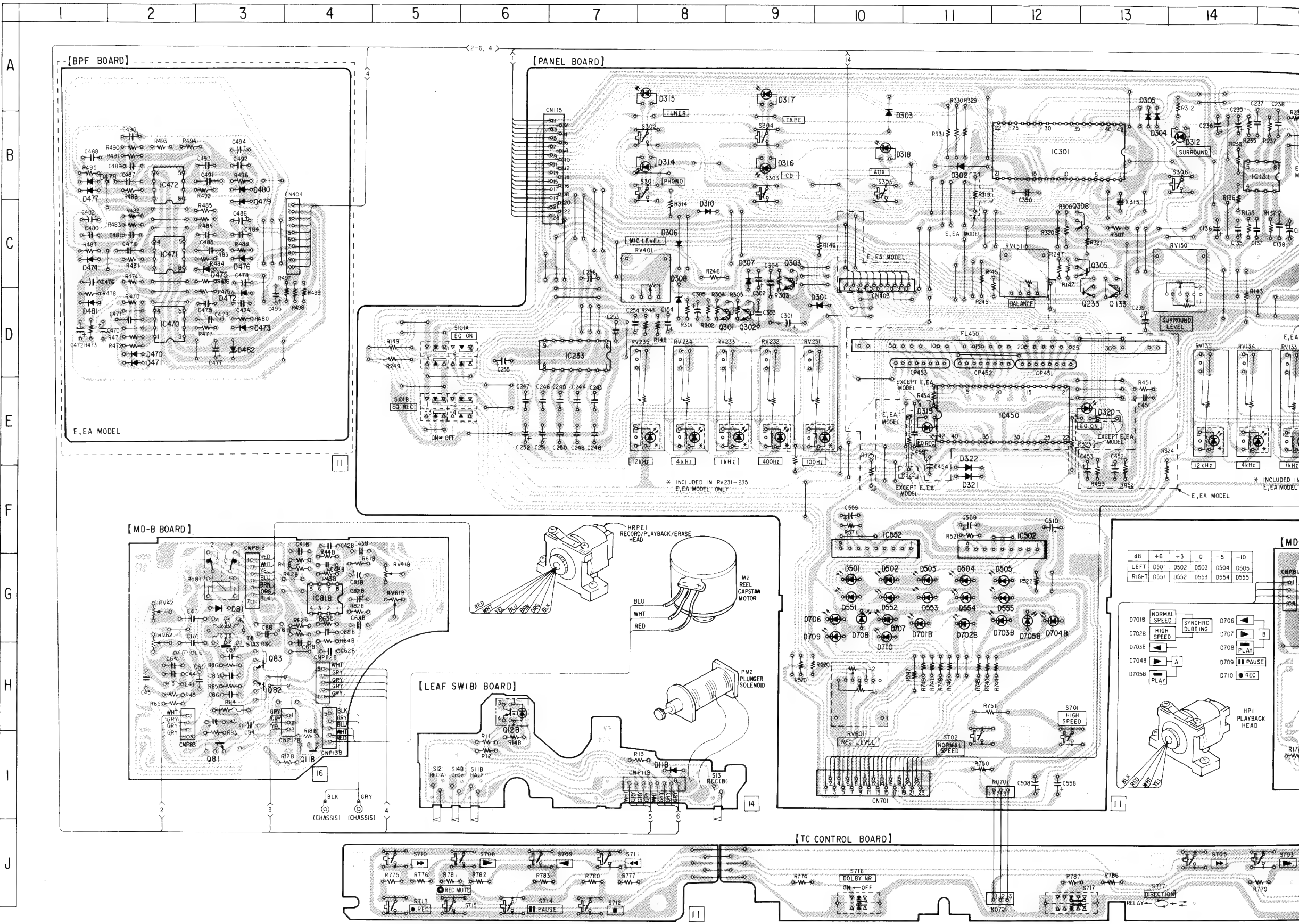
- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".





• Semiconductor Location

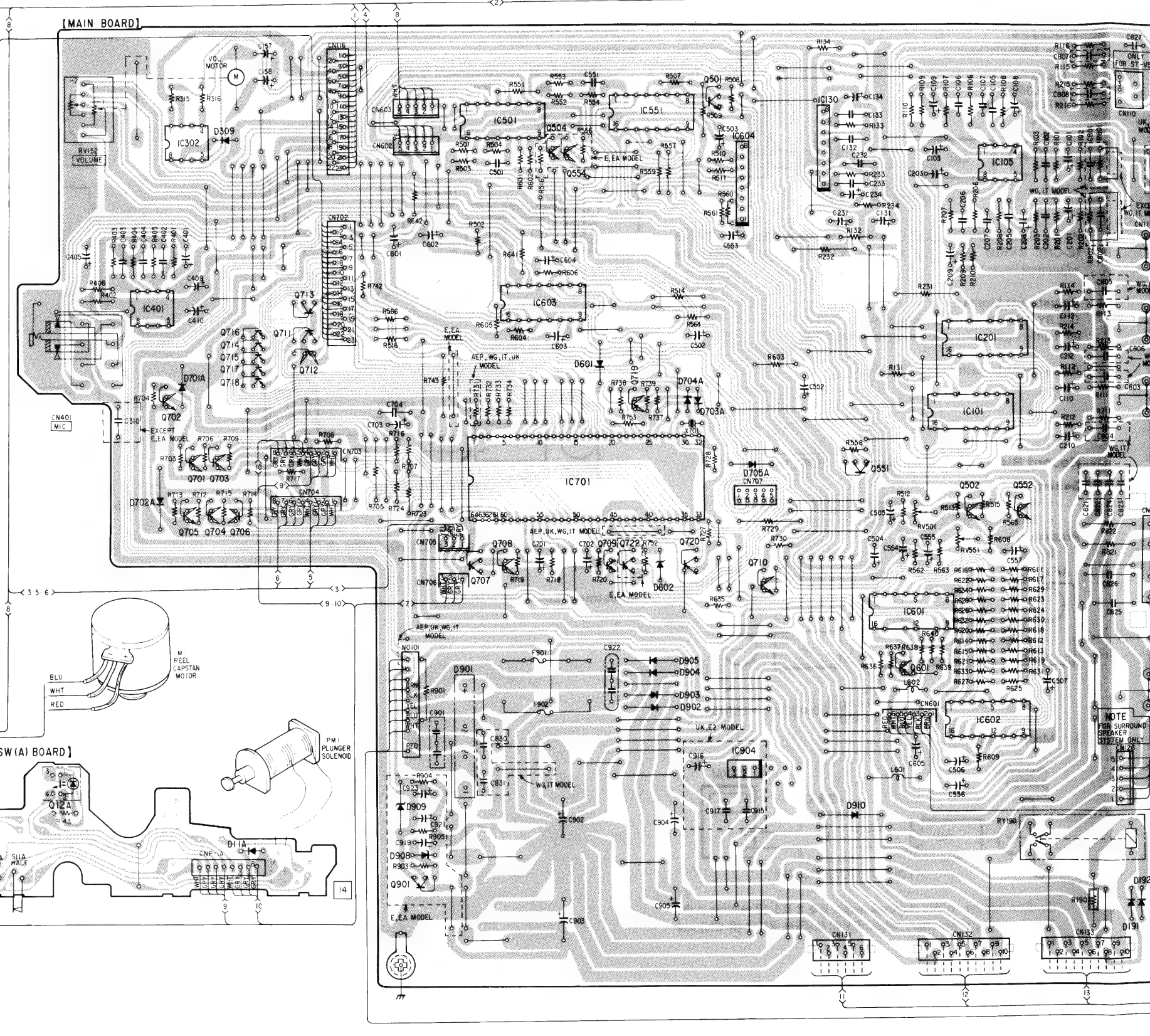
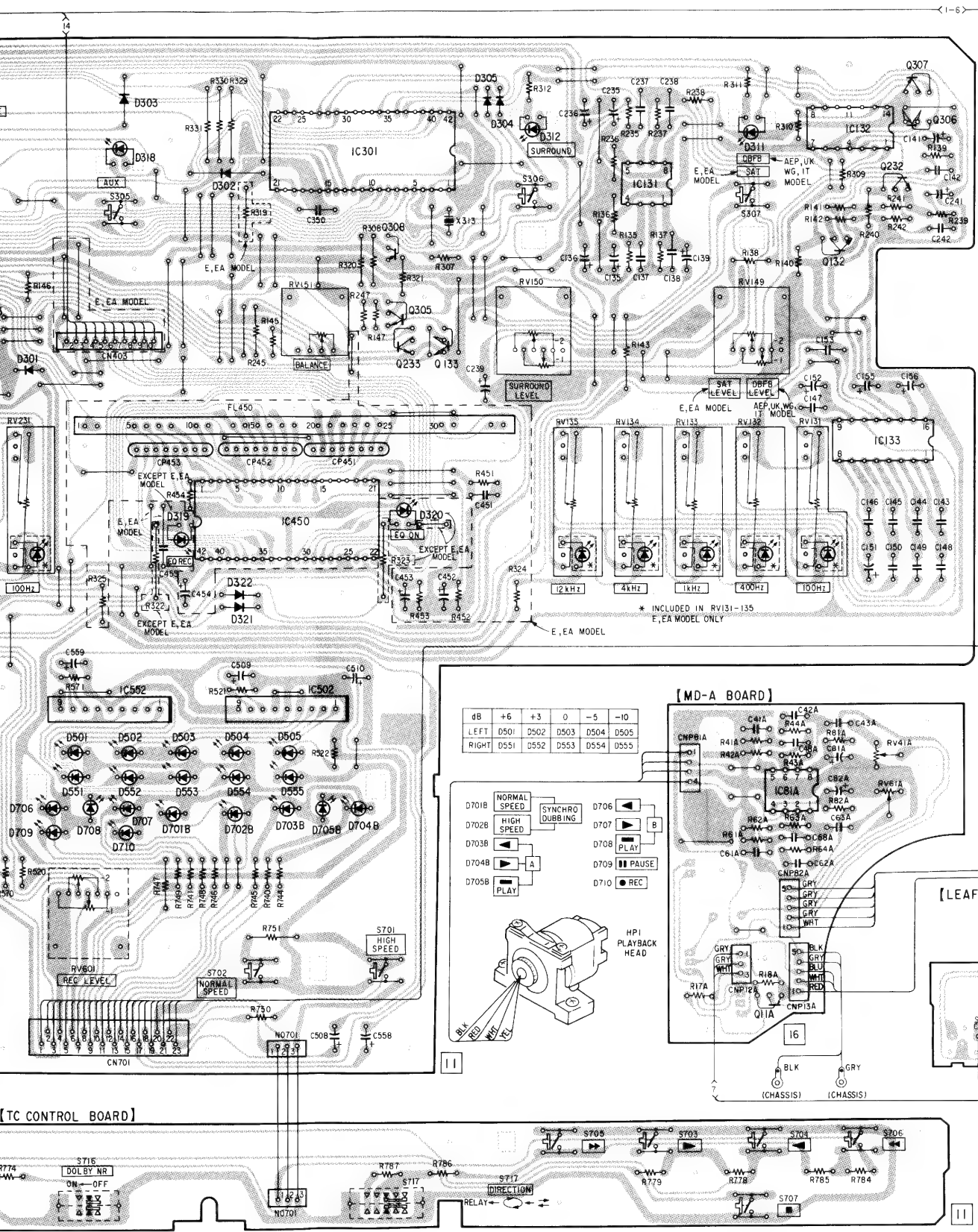
Ref. No.	Location	Ref. No.	Location
D11A	I-20	IC101	E-27
D11B	I-8	IC105	B-27
D81	G-3	IC130	B-26
D180	H-31	IC131	B-15
D190	H-32	IC132	B-16
D191	J-29	IC133	D-17
D192	J-29	IC170	H-30
D280	H-31	IC190	J-31
D301	D-10	IC201	D-27
D302	B-11	IC233	D-7
D303	A-10	IC301	B-12
D304	A-14	IC302	B-19
D305	A-13	IC401	D-19
D306	C-8	IC450	E-12
D307	C-9	IC470	D-2
D308	D-8	IC471	C-2
D309	B-20	IC472	B-2
D310	C-8	IC501	B-22
D311	B-16	IC502	F-12
D312	B-14	IC551	B-24
D314	B-8	IC552	F-10
D315	A-8	IC601	G-26
D316	B-9	IC602	H-27
D317	A-9	IC603	D-23
D318	B-10	IC604	B-25
D319	E-11	IC701	E-23
D320	E-13	IC901	D-30
D321	F-11	IC902	E-30
D322	F-11	IC903	D-30
D470	D-2	IC904	H-25
D471	D-2		
D472	D-3	Q11A	I-16
D473	D-3	Q11B	I-4
D474	C-1	Q12A	H-18
D475	C-3	Q12B	H-6
D476	C-3	Q81	I-3
D477	B-1	Q82	H-3
D478	B-1	Q83	H-3
D479	B-3	Q132	C-16
D480	B-3	Q133	C-13
D481	D-1	Q180	H-31
D482	D-3	Q190	H-32
D501	G-10	Q232	B-17
D502	G-10	Q233	C-13
D503	G-11	Q280	H-31
D504	G-11	Q301	D-9
D505	G-12	Q302	D-9
D551	G-10	Q303	C-9
D552	G-10	Q305	C-13
D553	G-11	Q306	B-17
D554	G-11	Q307	A-17
D555	G-12	Q308	C-13
D601	D-23	Q501	B-25
D602	F-24	Q502	F-27
D701A	D-19	Q504	B-23
D701B	G-11	Q551	E-26
D702A	F-19	Q552	F-28
D702B	G-11	Q554	B-23
D703A	E-24	Q601	G-26
D703B	G-12	Q701	E-19
D704A	E-24	Q702	E-19
D704B	G-12	Q703	E-20
D705A	E-25	Q704	F-20
D705B	G-12	Q705	F-19
D706	G-10	Q706	F-20
D707	G-10	Q707	F-22
D708	G-10	Q708	F-22
D709	G-10	Q709	F-24
D710	G-10	Q710	F-25
D901	H-22	Q711	D-21
D902	H-24	Q712	D-21
D903	H-24	Q713	D-21
D904	G-24	Q714	D-20
D905	G-24	Q715	D-20
D906	E-30	Q716	D-20
D907	D-30	Q717	D-20
D908	I-22	Q718	D-20
D909	I-21	Q719	E-24
D910	I-26	Q720	F-24
		Q722	F-24
IC81A	G-16	Q901	I-22
IC81B	G-4		



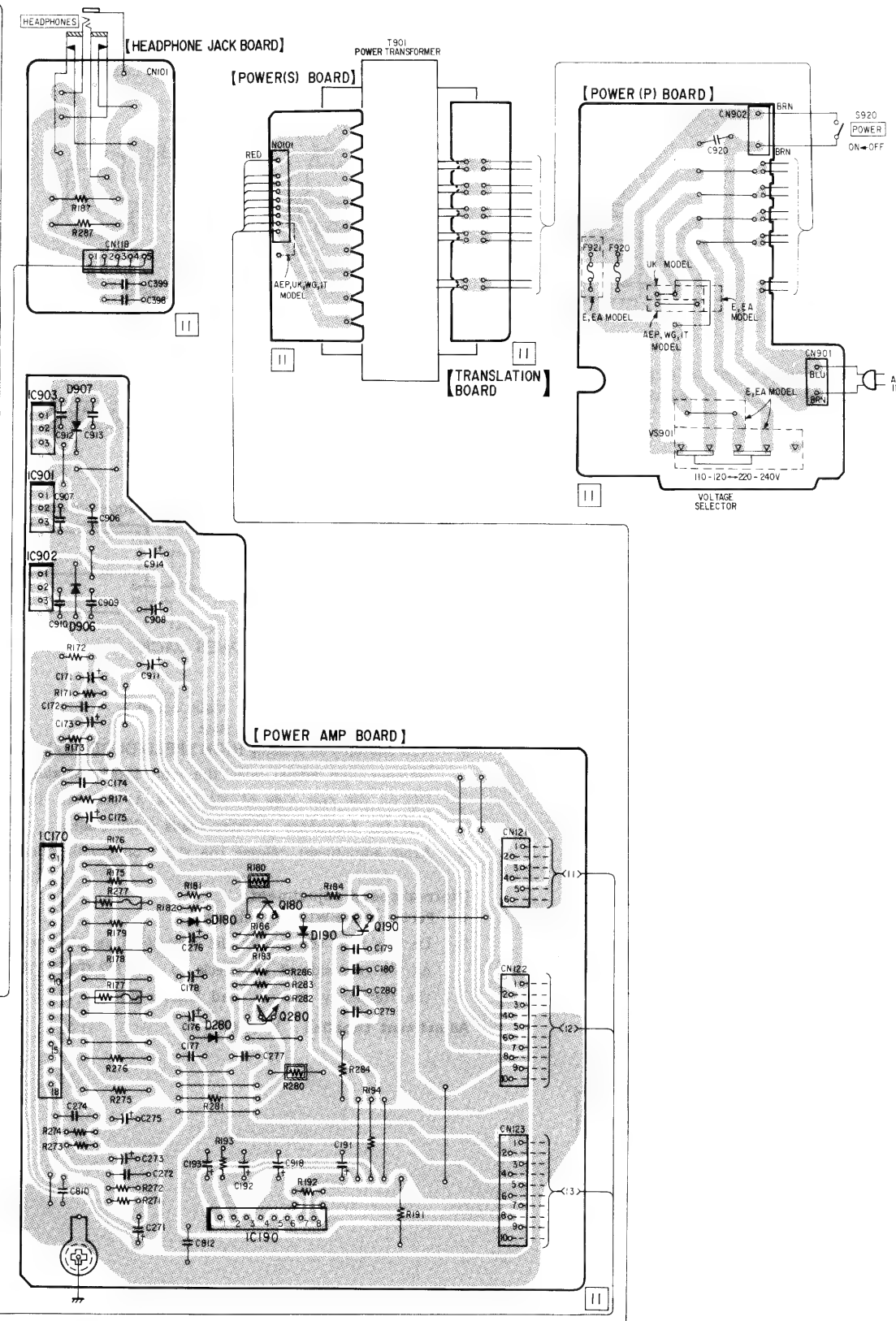
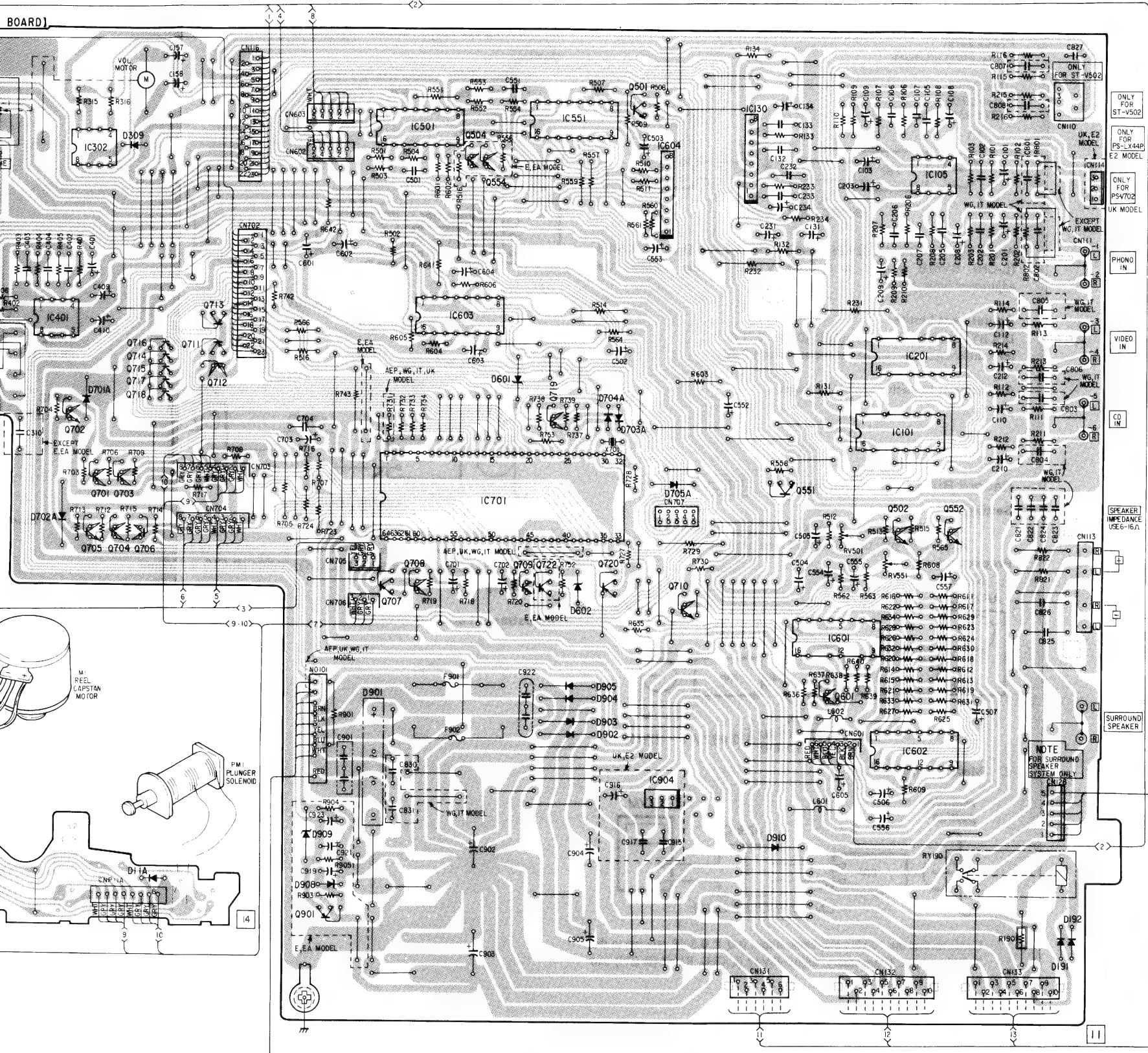
Note on Mounting Diagram:

- ○ : parts extracted from the component side.
- □ : indicates side identified with part number.

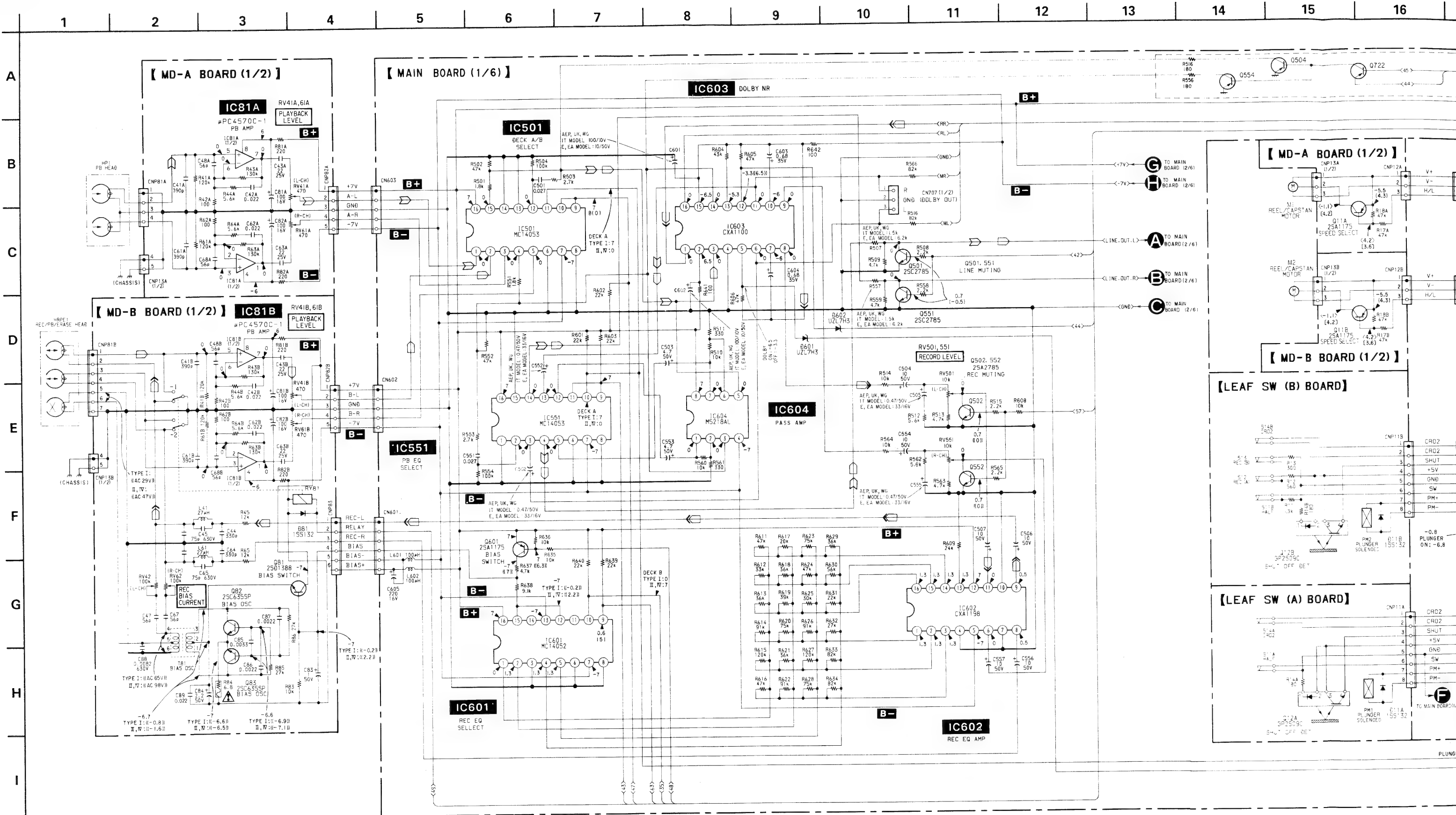
- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".



BOARD]

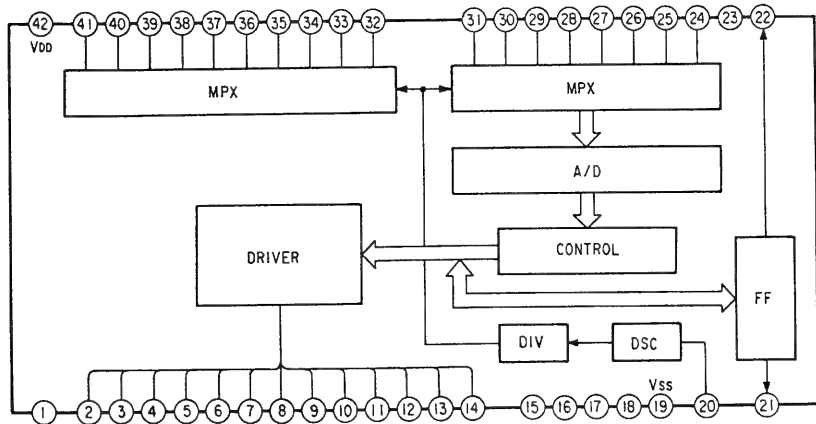


3-4. SCHEMATIC DIAGRAM (DECK SECTION)

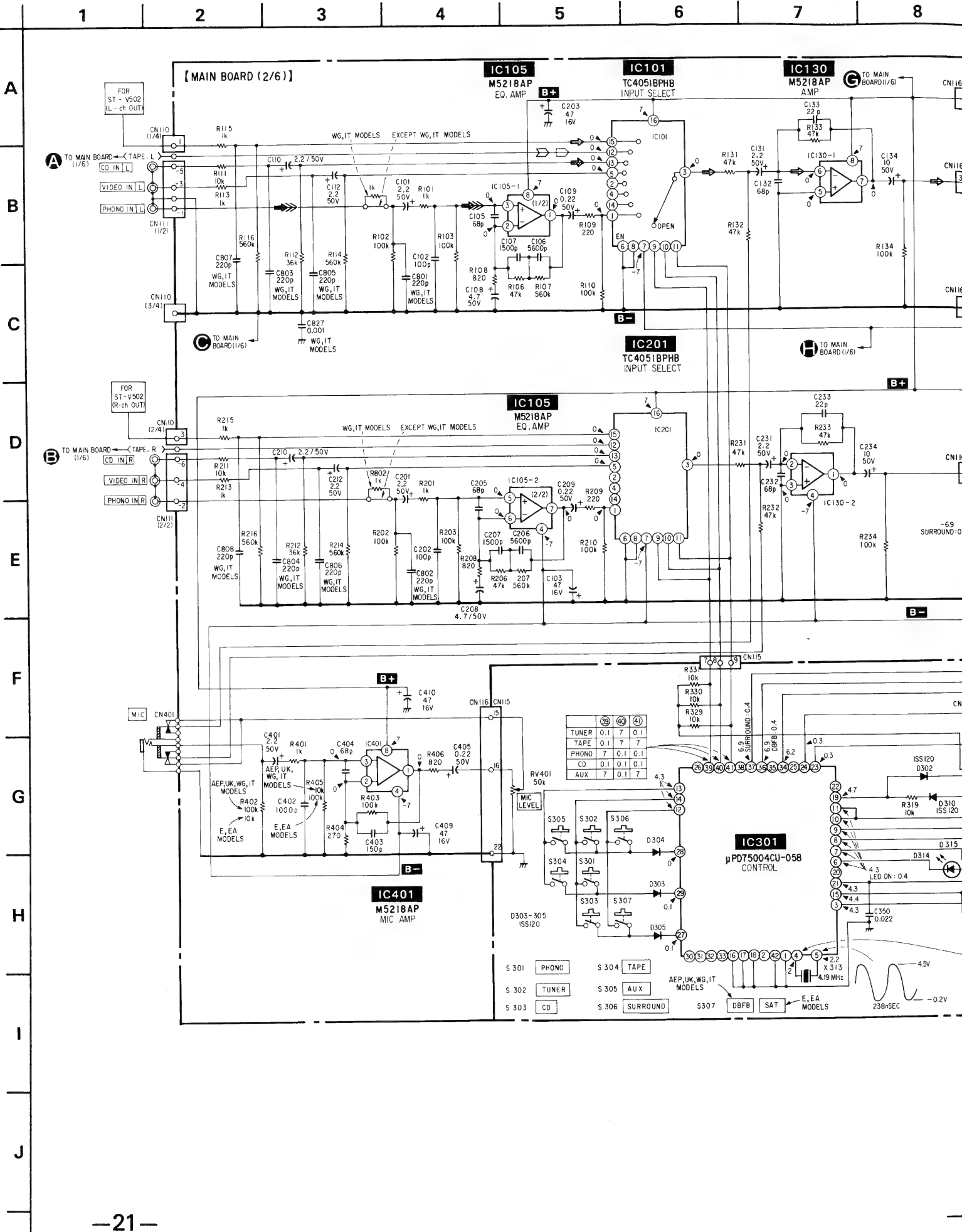


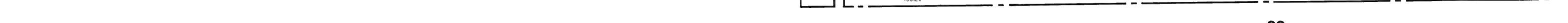
IC BLOCK DIAGRAM

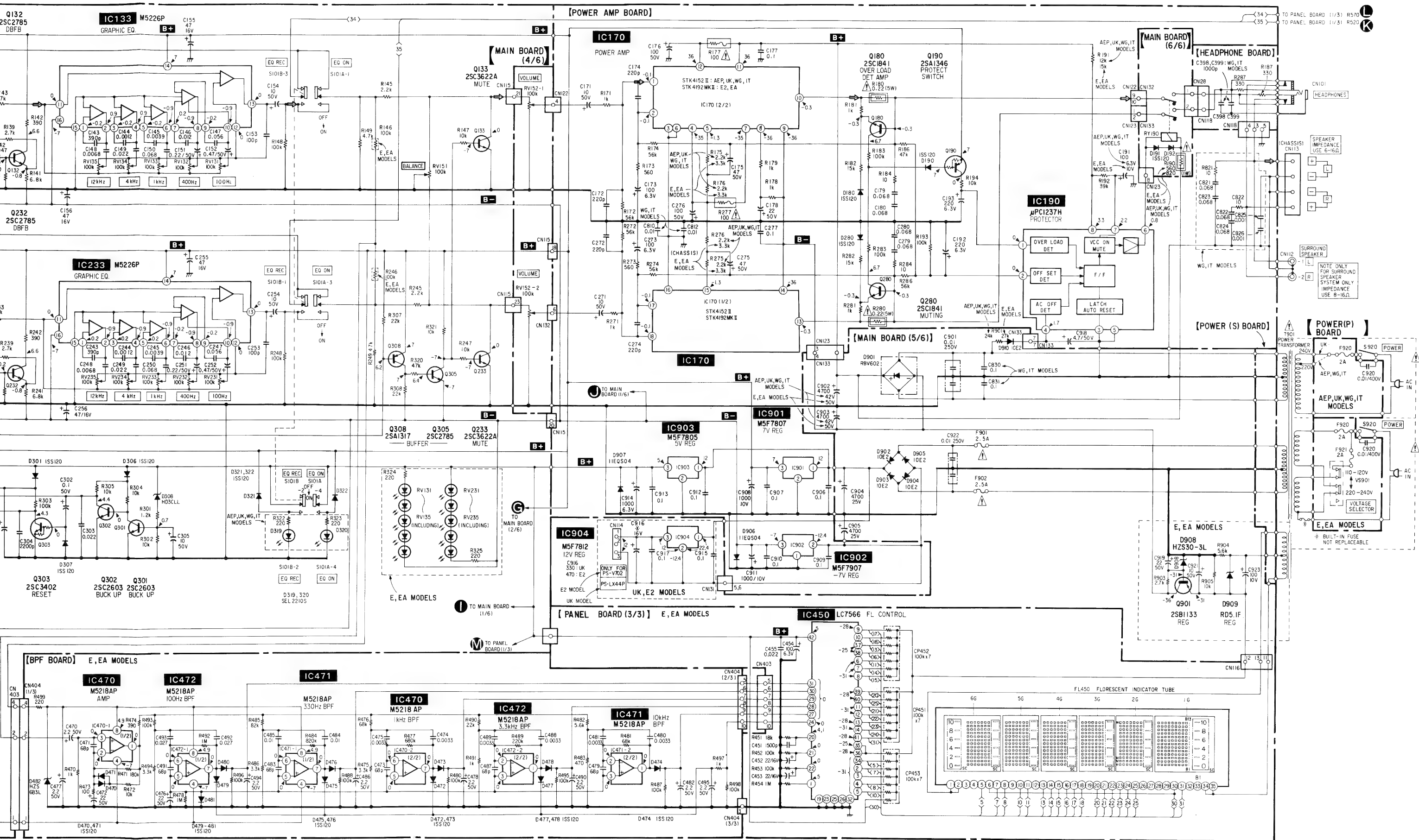
IC450 LC7566



3-5. SCHEMATIC DIAGR (AMPLIFIER SECTION) • See page 19 for notes.







SECTION 4

EXPLODED VIEWS



NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
Example:
(RED) ... KNOB, BALANCE (WHITE)

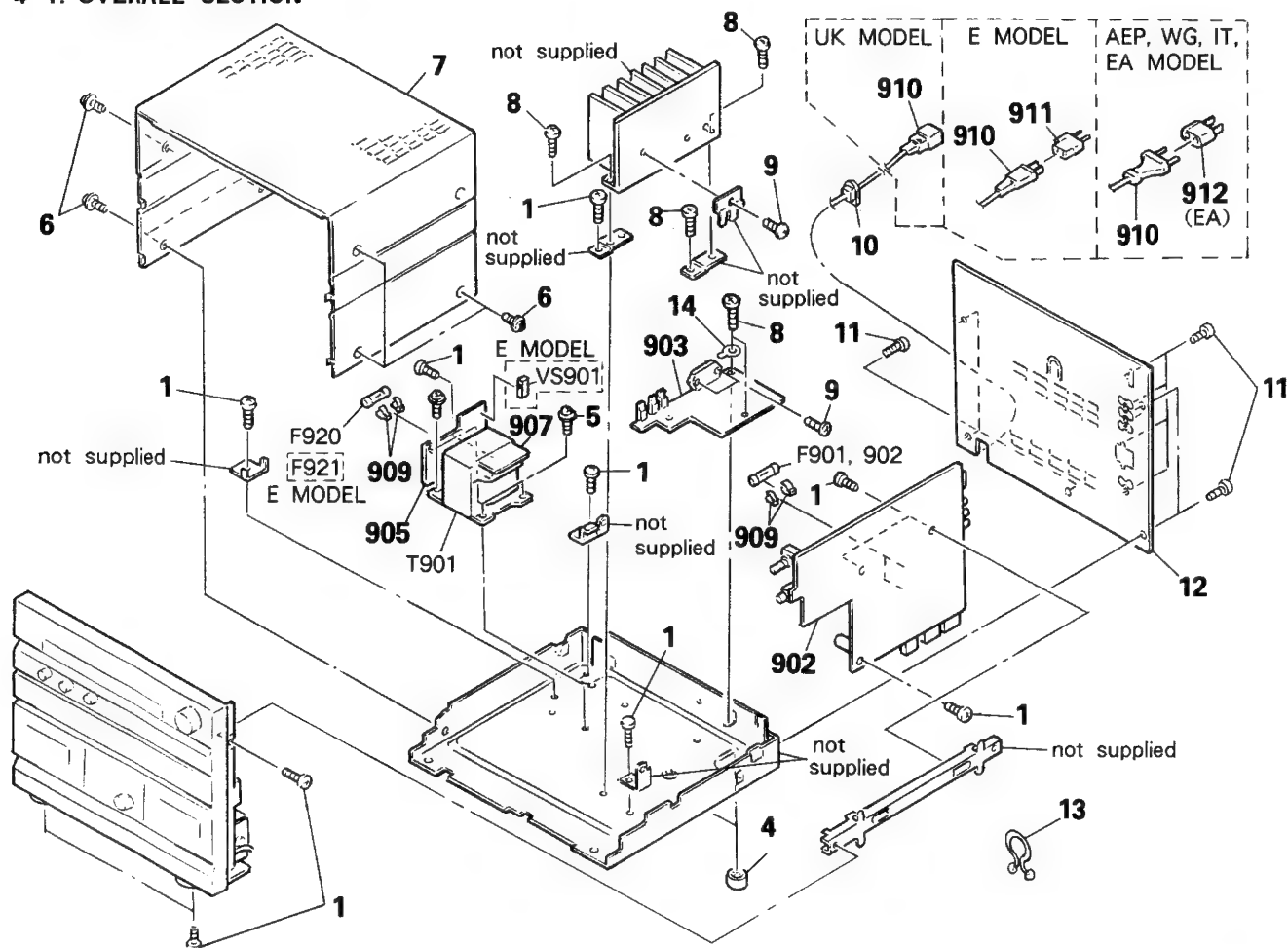
↑
Cabinet's Color

↑
Parts Color
- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

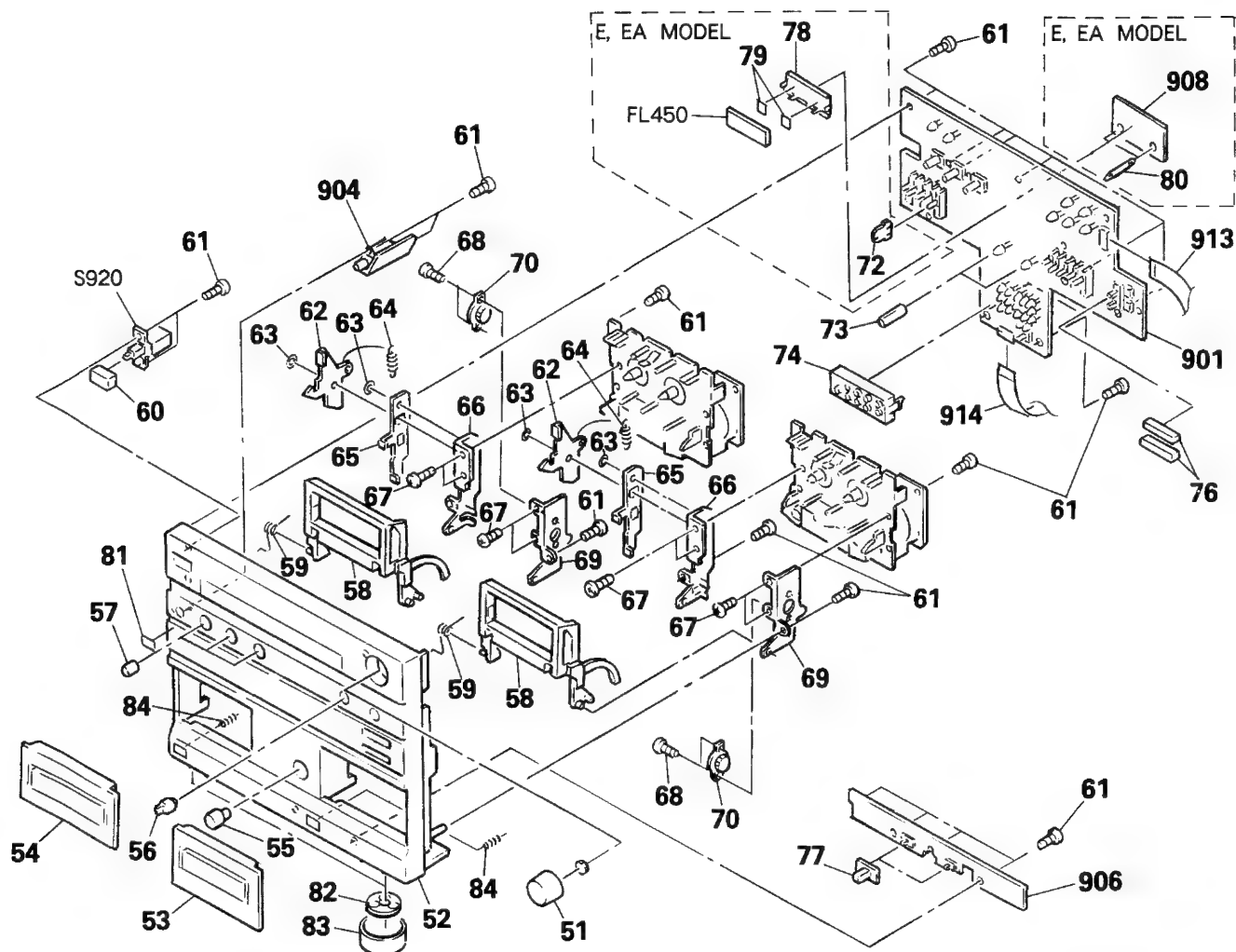
- WG : West Germany model
- IT : Italian model
- EA : Saudi Arabia model
- AUS : Australian model
- E2 : E model with turntable system
- E3 : E model without turntable system

4-1. OVERALL SECTION





No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	7-682-547-04	SCREW +BVTT 3X6 (S)		903	*A-4334-823-A	(AEP,UK)....MOUNTED PCB, POWER AMPLIFIER	
4	4-933-601-01	FOOT			*A-4334-824-A	(WG,IT).....MOUNTED PCB, POWER AMPLIFIER	
5	7-682-560-04	SCREW +BVTT 4X6 (S)			*A-4334-828-A	(E,EA,AUS)...MOUNTED PCB, POWER AMPLIFIER	
6	3-704-366-01	SCREW (CASE) (M3X8)		905	1-634-626-11	PC BOARD, POWER (P)	
7	4-935-368-41	CASE		907	*1-634-630-11	PC BOARD, POWER (S)	
8	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S		909	1-533-213-31	HOLDER, FUSE	
9	4-928-635-11	SCREW, +BV (2.6X16) TAPPING		910	△1-575-654-11	(AEP,WG,IT,EA)...CORD, POWER	
10	*3-703-244-00	(AEP,UK,WG,IT,EA)...BUSHING (2104), CORD			△1-575-656-11	(E,AUS).....CORD, POWER	
	3-703-571-00	(E,AUS).....BUSHING (S)(4516), CORD			△1-575-669-21	(UK).....CORD, POWER	
11	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S		911	△1-569-007-11	(E,AUS)...ADAPTOR, CONVERSION 2P	
12	*4-937-335-03	(AEP).....PANEL, BACK		912	△1-569-008-11	(EA)...ADAPTOR, CONVERSION 2P	
	*4-937-335-13	(E3,EA,AUS)...PANEL, BACK		F901	△1-532-286-00	FUSE T2.5A	
	*4-937-335-23	(WG).....PANEL, BACK		F902	△1-532-286-00	FUSE T2.5A	
	*4-937-335-31	(UK).....PANEL, BACK		F920	△1-532-388-51	FUSE T2A	
	*4-937-335-43	(E2).....PANEL, BACK		F921	△1-532-388-51	(E,EA,AUS)...FUSE T2A	
	*4-937-335-53	(IT).....PANEL, BACK		T901	△1-450-063-11	(AEP,UK,WG,IT)...TRANSFORMER, POWER	
13	3-315-159-01	PURSE LOOK (DIA.14)		T901	△1-450-064-11	(E,EA,AUS).....TRANSFORMER, POWER	
14	*4-904-446-01	PLATE, GROUND		VS901	△1-571-722-11	(E,EA,AUS)...SWITCH, VOLTAGE SELECTION (VOLTAGE)	
902	*A-4334-486-A	(E3,EA,AUS)...MOUNTED PCB, MAIN					
	*A-4334-487-A	(AEP).....MOUNTED PCB, MAIN					
	*A-4334-488-A	(WG,IT).....MOUNTED PCB, MAIN					
	*A-4334-489-A	(UK).....MOUNTED PCB, MAIN					
	*A-4334-535-A	(E2).....MOUNTED PCB, MAIN					

4-2. FRONT PANEL SECTION

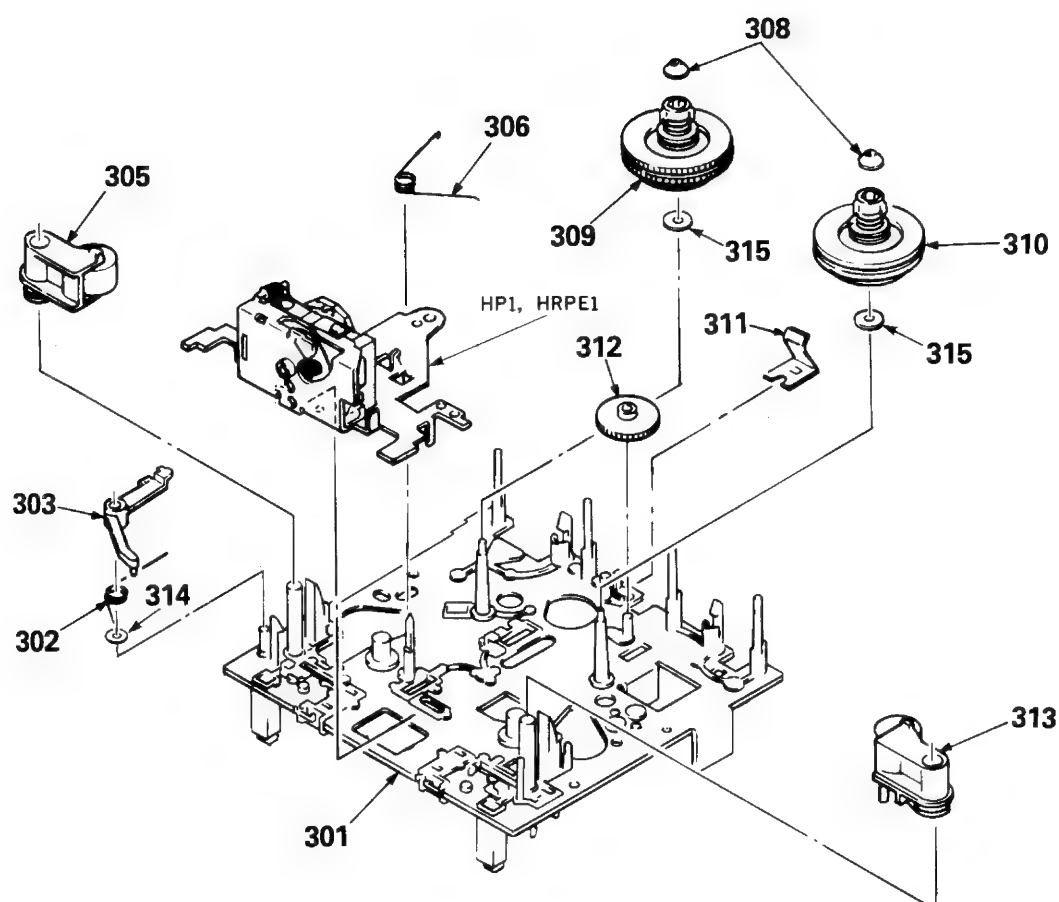


No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	X-4917-299-1	KNOB (VOL) ASSY		73	*4-937-336-01	(AEP,UK,WG,IT)...HOLDER, LED	
52	X-4919-305-1	(AEP,UK,WG,IT)...PANEL ASSY, FRONT		74	*4-937-327-01	HOLDER (TC), LED	
	X-4919-306-2	(E,EA,AUS).....PANEL ASSY, FRONT		76	4-937-318-01	BUTTON (EQ)	
53	X-4919-303-1	LID (B) ASSY, CASSETTE		77	3-350-138-01	KNOB (SLIDE)	
54	X-4919-302-1	LID (A) ASSY, CASSETTE		78	*4-923-103-01	(E,EA,AUS)...HOLDER, FL TUBE	
55	X-4919-301-1	KNOB (REC) ASSY		79	*4-921-941-21	(E,EA,AUS)...CUSHION (FL)	
56	4-937-331-01	KNOB (EQ)		80	3-682-419-21	(E,EA,AUS)...HOLDER PCB	
57	3-349-039-11	KNOB (VOL)		81	*3-703-710-41	STICKER, SONY SYMBOL (12)	
58	X-3332-482-1	HOLDER ASSY, CASSETTE		82	4-921-906-01	FELT	
59	3-346-336-11	SPRING, TORSION		83	4-921-918-01	PLATE, ORNAMENTAL	
60	3-350-146-01	BUTTON (PW)		84	4-885-182-11	SPRING, TENSION	
61	4-928-635-01	SCREW, +BV (2.6X8) TAPPING		901	*A-4334-477-A	(E,EA,AUS)...MOUNTED PCB, PANEL	
62	*3-343-449-01	LEVER (LOCK LEVER)			*A-4334-478-A	(AEP)....MOUNTED PCB, PANEL	
63	3-558-708-21	WASHER, STOPPER			*A-4334-479-A	(WG,IT)...MOUNTED PCB, PANEL	
64	3-312-432-00	SPRING, TENSION			*A-4334-480-A	(UK).....MOUNTED PCB, PANEL	
65	*3-329-997-01	LEVER (EJECT)		904	*1-634-624-11	PC BOARD, H.P.	
66	*X-3329-913-1	BRACKET ASSY		906	*1-634-627-11	PC BOARD, TC CONTROL	
67	7-621-770-87	SCREW +BVTT 2.6X5 (S)		908	*1-634-625-11	(E,EA,AUS)...PC BOARD, BPF	
68	7-621-255-15	SCREW +PTT 2X3 (S)		913	1-575-664-11	WIRE, FLAT TYPE (23 CORE)	
69	*3-346-305-01	BRACKET (DAMPER)		914	1-575-665-11	WIRE, FLAT TYPE (23 CORE)	
70	3-319-224-31	DAMPER, SMALL		FL450	1-519-486-21	(E,EA,AUS)...INDICATOR TUBE, FLORESCENT	
72	4-911-230-01	(E,EA,AUS)...KNOB, SLIDE		S920	Δ1-553-318-41	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)	

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

4-3. MECHANISM SECTION (1)

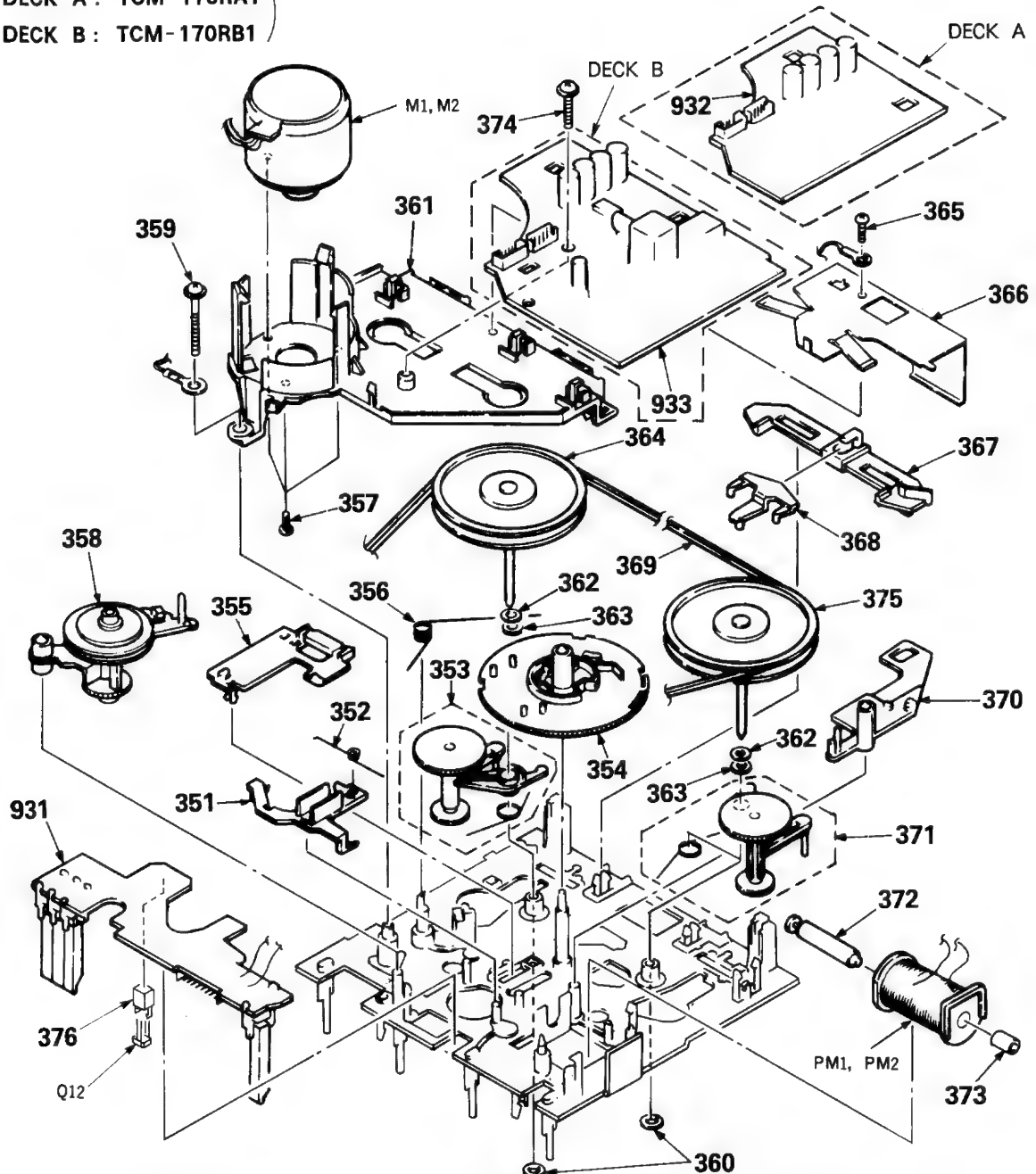
(DECK A : TCM-170RA1)
 (DECK B : TCM-170RB1)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
301	X-3343-439-1	CHASSIS ASSY, MECHANICAL		311	3-343-420-01	SPRING, LEAF	
302	3-343-477-01	SPRING, TORSION (EJECT SAFTY)		312	3-343-411-01	GEAR (FF GEAR)	
303	3-343-476-01	LEVER (EJECT SAFETY LEVER)		313	X-3343-455-1	LEVER (PINCH F) ASSY	
305	X-3343-456-1	LEVER (PINCH R) ASSY		314	3-343-487-01	WASHER	
306	3-343-401-01	SPRING, TORSION		315	3-355-802-01	WASHER	
308	3-343-439-01	CAP (REEL TABLE)		HP1	A-2108-122-C	(DECK A)...CHASSIS ASSY, HEAD (P B)	
309	X-3343-415-1	TABEL (REV) ASSY, REEL		HRPE1	A-2108-123-C	(DECK B)...CHASSIS ASSY, HEAD (REC/PB/ERIS E)	
310	X-3343-401-1	TABEL ASSY, REEL					

4-4. MECHANISM SECTION (2)

(DECK A : TCM-170RA1)
(DECK B : TCM-170RB1)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
351	3-343-453-01	SLIDER (BRAKE PLATE)		368	3-343-462-01	LEVER	
352	3-343-429-01	SPRING, TORSION		369	3-343-426-02	BELT (CAPSTAN BELT SQUARE)	
353	X-3343-454-1	LEVER (TU-R) ASSY		370	3-343-493-01	LEVER (PM LEVER)	
354	3-343-470-01	GEAR (CAM GEAR)		371	X-3343-453-1	LEVER (TU-F) ASSY	
355	3-343-461-01	SLIDER		372	*3-343-425-01	ARBOR (MOVABLE IRON ARBOR), IRON	
356	3-343-430-01	SPRING, TORSION		373	*3-343-424-01	ARBOR (FIXED IRON ARBOR), IRON	
357	7-627-556-28	SCREW +P 2.6X3.5		374	3-343-404-01	SCREW (PTPHW 2X12)	
358	X-3343-414-1	LAVER (FR ARM) ASSY		375	X-3343-429-1	FLYWHEEL COMPLETE ASSY	
359	3-355-801-01	SCREW (BTP 2X18)		376	3-343-419-01	HOLDER (S SENSOR A)	
360	3-343-473-01	WASHER, NYLON		931	*1-624-148-11	PC BOARD, LEAF SW	
361	*X-3343-407-1	BASE (THRUST RETAINER) ASSY		932	*1-624-147-11	PC BOARD, MD-A	
362	4-605-835-11	WASHER (2.6), POLYSLIDER		933	*1-624-146-11	PC BOARD, MD-B	
363	3-307-482-00	WASHER, LUMILER		M1	X-3343-447-1	(DECK A)...REEL/CAPSTAN MOTOR ASSY	
364	X-3343-416-7	FLYWHEEL (REV) COMPLETE ASSY		M2	X-3343-447-1	(DECK B)...REEL/CAPSTAN MOTOR ASSY	
365	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT		PM1	1-454-456-11	(DECK A)...SOLENOID, PLUNGER	
366	3-343-480-01	PLATE, SHIELD		PM2	1-454-456-11	(DECK B)...SOLENOID, PLUNGER	
367	3-343-457-01	SLIDER (REVERSE SLIDER)					

SECTION 5

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:MF: μ F, PF: μ F.**RESISTORS**



- All resistors are in ohms.
- F: nonflammable

COILS






- MMH: mH, UH: μ H

SEMICONDUCTORSIn each case, U: μ , for example:UA...: μ A..., UPA...: μ PA...,
UPC...: μ PC, UPD...: μ PD...

- Mark "E, (E3) Model" is used as mark "E, (E3) and Australia Model".

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

- WG: West Germany model
- IT: Italian model
- EA: Saudi Arabia model
- AUS: Australian model
- E2: E model with turntable system
- E3: E model without turntable system



Ref.No.	Part No.	Description	Ref.No.	Part No.	Description				
901	*A-4334-477-A	(E,EA,AUS)...MOUNTED PCB, PANEL	C82A	1-126-101-11	ELECT	100MF	20%	16V	
	*A-4334-478-A	(AEP).....MOUNTED PCB, PANEL	C82B	1-126-101-11	ELECT	100MF	20%	16V	
	*A-4334-479-A	(WG,IT).....MOUNTED PCB, PANEL							
	*A-4334-480-A	(UK).....MOUNTED PCB, PANEL	C83	1-124-791-11	ELECT	1MF	20%	50V	
902	*A-4334-486-A	(E3,EA,AUS)...MOUNTED PCB, MAIN	C84	1-124-925-11	ELECT	2.2MF	20%	50V	
	*A-4334-487-A	(AEP).....MOUNTED PCB, MAIN	C85	1-130-477-00	MYLAR	0.0033MF	5%	50V	
	*A-4334-488-A	(WG,IT).....MOUNTED PCB, MAIN	C86	1-130-475-00	MYLAR	0.0022MF	5%	50V	
	*A-4334-489-A	(UK).....MOUNTED PCB, MAIN	C87	1-130-475-00	MYLAR	0.0022MF	5%	50V	
	*A-4334-535-A	(E2).....MOUNTED PCB, MAIN	C88	1-136-562-11	FILM	0.0082MF	5%	630V	
903	*A-4334-823-A	(AEP,UK)...MOUNTED PCB, POWER AMPLIFIER	C89	1-161-494-00	CERAMIC	0.022MF		25V	
	*A-4334-824-A	(WG,IT)....MOUNTED PCB, POWER AMPLIFIER	C101	1-126-161-11	ELECT	2.2MF	20%	50V	
	*A-4334-828-A	(E,EA,AUS) ...MOUNTED PCB, POWER AMPLIFIER	C102	1-162-282-31	CERAMIC	100PF	10%	50V	
904	*1-634-624-11	PC BOARD, H.P.	C103	1-126-022-11	ELECT	47MF	20%	16V	
905	*1-634-626-11	PC BOARD, POWER (P)	C105	1-162-219-31	CERAMIC	68PF	5%	50V	
906	*1-634-627-11	PC BOARD, TC CONTROL	C106	1-130-480-00	MYLAR	0.0056MF	5%	50V	
907	*1-634-630-11	PC BOARD, POWER (S)	C107	1-130-473-00	MYLAR	0.0015MF	5%	50V	
908	*1-634-625-11	(E,EA,AUS)...PC BOARD, BPF	C108	1-124-045-00	ELECT	4.7MF	20%	50V	
909	1-533-213-31	HOLDER, FUSE	C109	1-124-464-11	ELECT	0.22MF	20%	50V	
910	 1-575-654-11	(AEP,WG,IT,EA)...CORD, POWER	C110	1-126-161-11	ELECT	2.2MF	20%	50V	
	 1-575-656-11	(E,AUS).....CORD, POWER	C112	1-162-161-11	ELECT	2.2MF	20%	50V	
	 1-575-669-21	(UK).....CORD, POWER	C131	1-126-161-11	ELECT	2.2MF	20%	50V	
911	 1-569-007-11	(E,AUS)...ADAPTOR, CONVERSION 2P	C132	1-162-219-31	CERAMIC	68PF	5%	50V	
912	 1-569-008-11	(EA)...ADAPTOR, CONVERSION 2P	C133	1-162-207-31	CERAMIC	22PF	5%	50V	
913	1-575-664-11	WIRE, FLAT TYPE (23 CORE)	C134	1-126-059-11	ELECT	10MF	20%	50V	
914	1-575-665-11	WIRE, FLAT TYPE (23 CORE)	C135	1-126-022-11	ELECT	47MF	20%	16V	
931	*1-624-148-11	PC BOARD, LEAF SW	C136	1-126-161-11	ELECT	2.2MF	20%	50V	
932	*1-624-147-11	PC BOARD, MD-A	C137	1-162-219-31	CERAMIC	68PF	5%	50V	
933	*1-624-146-11	PC BOARD, MD-B	C138	1-162-282-31	CERAMIC	100PF	10%	50V	
C48A	1-162-217-31	CERAMIC	C139	1-124-261-00	ELECT	10MF	20%	50V	
C48B	1-162-217-31	CERAMIC	C141	1-124-465-00	ELECT	0.47MF	20%	50V	
C61A	1-162-289-31	CERAMIC	C142	1-136-834-11	FILM	0.047MF	5%	50V	
C61B	1-162-289-31	CERAMIC	C143	1-110-342-11	MYLAR	390PF	5%	50V	
C62A	1-136-157-00	FILM	C144	1-130-472-00	MYLAR	0.0012MF	5%	50V	
C62B	1-136-157-00	FILM	C145	1-130-478-00	MYLAR	0.0039MF	5%	50V	
C63A	1-124-282-00	ELECT	C146	1-136-154-00	FILM	0.012MF	5%	50V	
C63B	1-124-282-00	ELECT	C147	1-136-835-11	FILM	0.056MF	5%	50V	
C64	1-162-288-31	CERAMIC	C148	1-130-481-00	MYLAR	0.0068MF	5%	50V	
C65	1-136-273-91	FILM	C149	1-136-157-00	FILM	0.022MF	5%	50V	
C67	1-162-217-31	CERAMIC	C150	1-136-741-11	FILM	0.068MF	5%	50V	
C68A	1-162-217-31	CERAMIC	C151	1-124-464-11	ELECT	0.22MF	20%	50V	
C68B	1-162-217-31	CERAMIC	C152	1-124-465-00	ELECT	0.47MF	20%	50V	
C81A	1-126-101-11	ELECT	C153	1-162-282-31	CERAMIC	100PF	10%	50V	
C81B	1-126-101-11	ELECT	C154	1-124-261-00	ELECT	10MF	20%	50V	
			C155	1-124-589-11	ELECT	47MF	20%	16V	
			C156	1-124-589-11	ELECT	47MF	20%	16V	

Ref.No.	Part No.	Description			
C157	1-124-963-11	ELECT	33MF	20%	16V
C158	1-124-963-11	ELECT	33MF	20%	16V
C171	1-126-059-11	ELECT	10MF	20%	50V
C172	1-162-286-31	CERAMIC	220PF	10%	50V
C173	1-124-443-00	ELECT	100MF	20%	6.3V
C174	1-162-286-31	CERAMIC	220PF	10%	50V
C175	1-124-910-11	ELECT	47MF	20%	50V
C176	1-124-122-11	ELECT	100MF	20%	50V
C177	1-136-742-11	FILM	0.1MF	5%	50V
C178	1-126-233-11	ELECT	22MF	20%	50V
C179	1-136-741-11	FILM	0.068MF	5%	50V
C180	1-136-741-11	FILM	0.068MF	5%	50V
C181	1-162-211-31	CERAMIC	33PF	5%	50V
C191	1-124-443-00	ELECT	100MF	20%	6.3V
C192	1-124-587-11	ELECT	220MF	20%	6.3V
C193	1-124-587-11	ELECT	220MF	20%	6.3V
C201	1-126-161-11	ELECT	2.2MF	20%	50V
C202	1-162-282-31	CERAMIC	100PF	10%	50V
C203	1-126-022-11	ELECT	47MF	20%	16V
C205	1-162-219-31	CERAMIC	68PF	5%	50V
C206	1-130-480-00	MYLAR	0.0056MF	5%	50V
C207	1-130-473-00	MYLAR	0.0015MF	5%	50V
C208	1-124-045-00	ELECT	4.7MF	20%	50V
C209	1-124-464-11	ELECT	0.22MF	20%	50V
C210	1-126-161-11	ELECT	2.2MF	20%	50V
C212	1-126-161-11	ELECT	2.2MF	20%	50V
C231	1-126-161-11	ELECT	2.2MF	20%	50V
C232	1-162-219-31	CERAMIC	68PF	5%	50V
C233	1-162-207-31	CERAMIC	22PF	5%	50V
C234	1-126-059-11	ELECT	10MF	20%	50V
C235	1-126-022-11	ELECT	47MF	20%	16V
C236	1-126-161-11	ELECT	2.2MF	20%	50V
C237	1-162-219-31	CERAMIC	68PF	5%	50V
C238	1-162-282-31	CERAMIC	100PF	10%	50V
C239	1-126-157-11	ELECT	10MF	20%	50V
C241	1-124-465-00	ELECT	0.47MF	20%	50V
C242	1-136-834-11	FILM	0.047MF	5%	50V
C243	1-110-342-11	MYLAR	390PF	5%	50V
C244	1-130-472-00	MYLAR	0.0012MF	5%	50V
C245	1-130-478-00	MYLAR	0.0039MF	5%	50V
C246	1-136-154-00	FILM	0.012MF	5%	50V
C247	1-136-835-11	FILM	0.056MF	5%	50V
C248	1-130-481-00	MYLAR	0.0068MF	5%	50V
C249	1-136-157-00	FILM	0.022MF	5%	50V
C250	1-136-741-11	FILM	0.068MF	5%	50V
C251	1-124-464-11	ELECT	0.22MF	20%	50V
C252	1-124-465-00	ELECT	0.47MF	20%	50V
C253	1-162-282-31	CERAMIC	100PF	10%	50V
C254	1-126-157-11	ELECT	10MF	20%	50V
C255	1-124-589-11	ELECT	47MF	20%	16V
C256	1-124-589-11	ELECT	47MF	20%	16V
C271	1-123-875-11	ELECT	10MF	20%	50V
C272	1-162-286-31	CERAMIC	220PF	10%	50V
C273	1-124-443-00	ELECT	100MF	20%	6.3V
C274	1-162-286-31	CERAMIC	220PF	10%	50V
C275	1-124-910-11	ELECT	47MF	20%	50V
C276	1-124-122-11	ELECT	100MF	20%	50V

Ref.No.	Part No.	Description			
C277	1-136-742-11	FILM	0.1MF	5%	50V
C279	1-136-741-11	FILM	0.068MF	5%	50V
C280	1-136-741-11	FILM	0.068MF	5%	50V
C281	1-162-211-31	CERAMIC	33PF	5%	50V
C301	1-125-486-11	DOUBLE LAYERS	0.22F		5.5V
C302	1-136-742-11	FILM	0.1MF	5%	50V
C303	1-161-494-00	CERAMIC	0.022MF		25V
C304	1-161-494-00	CERAMIC	0.022MF		25V
C305	1-126-157-11	ELECT	10MF	20%	50V
C310	1-164-159-11	CERAMIC	0.1MF		50V
C350	1-161-494-00	CERAMIC	0.002MF		25V
C398	1-162-294-11	CERAMIC	0.001MF	10%	50V
C399	1-162-294-11	CERAMIC	0.001MF	10%	50V
C401	1-124-925-11	ELECT	2.2MF	20%	50V
C402	1-162-294-31	CERAMIC	0.001MF	10%	50V
C403	1-162-284-31	CERAMIC	150PF	10%	50V
C404	1-162-219-31	CERAMIC	68PF	5%	50V
C405	1-124-464-11	ELECT	0.22MF	20%	50V
C409	1-126-022-11	ELECT	47MF	20%	16V
C410	1-126-022-11	ELECT	47MF	20%	16V
C451	1-161-374-11	(E,EA,AUS)...CERAMIC	0.0015MF	30%	16V
C452	1-124-234-00	(E,EA,AUS)...ELECT	22MF	20%	16V
C453	1-124-234-00	(E,EA,AUS)...ELECT	22MF	20%	16V
C454	1-126-177-11	(E,EA,AUS)...ELECT	100MF	20%	6.3V
C455	1-161-494-00	(E,EA,AUS)...CERAMIC	0.022MF		25V
C470	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C471	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C472	1-126-233-11	(E,EA,AUS)...ELECT	22MF	20%	50V
C473	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C474	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C475	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C476	1-126-233-11	(E,EA,AUS)...ELECT	22MF	20%	50V
C477	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C478	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C479	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C480	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C481	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C482	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C483	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C484	1-136-153-00	(E,EA,AUS)...MYLAR	0.01MF	5%	50V
C485	1-136-153-00	(E,EA,AUS)...MYLAR	0.01MF	5%	50V
C486	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C487	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C488	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C489	1-130-477-11	(E,EA,AUS)...MYLAR	0.0033MF	5%	50V
C490	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C491	1-162-219-31	(E,EA,AUS)...CERAMIC	68PF	5%	50V
C492	1-136-158-00	(E,EA,AUS)...MYLAR	0.027MF	5%	50V
C493	1-136-158-00	(E,EA,AUS)...MYLAR	0.027MF	5%	50V
C494	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C495	1-124-925-11	(E,EA,AUS)...ELECT	2.2MF	20%	50V
C501	1-136-158-00	FILM	0.027MF	5%	50V
C502	1-124-902-00	(E,EA,AUS).....ELECT	33MF	20%	16V
C502	1-126-300-11	(AEP,UK,WG,IT)...ELECT	0.47MF	20%	50V
C503	1-124-045-00	ELECT	4.7MF	20%	50V
C504	1-126-059-11	ELECT	10MF	20%	50V

Ref.No.	Part No.	Description						
C505	1-124-902-00	(E,EA,AUS).....ELECT	33MF	20%	16V			
C505	1-126-300-11	(AEP,UK,WG,IT)...ELECT	0.47MF	20%	50V			
C506	1-126-059-11	(AEP,UK,WG,IT)...ELECT	10MF	20%	50V			
C507	1-126-059-11	(AEP,UK,WG,IT)...ELECT	10MF	20%	50V			
C508	1-126-161-11	(AEP,UK,WG,IT)...ELECT	2.2MF	20%	50V			
C509	1-124-261-00	ELECT	10MF	20%	50V			
C510	1-124-261-00	ELECT	10MF	20%	50V			
C551	1-136-158-00	FILM	0.027MF	5%	50V			
C552	1-124-300-11	(AEP,UK,WG,IT)...ELECT	0.47MF	20%	50V			
C552	1-124-902-00	(E,EA,AUS).....ELECT	33MF	20%	16V			
C553	1-124-045-00	ELECT	4.7MF	20%	50V			
C554	1-126-059-11	ELECT	10MF	20%	50V			
C555	1-124-902-00	(E,EA,AUS).....ELECT	33MF	20%	16V			
C555	1-126-300-11	(AEP,UK,WG,IT)...ELECT	0.47MF	20%	50V			
C556	1-126-059-11	ELECT	10MF	20%	50V			
C557	1-126-059-11	ELECT	10MF	20%	50V			
C558	1-126-161-11	ELECT	2.2MF	20%	50V			
C559	1-124-261-00	ELECT	10MF	20%	50V			
C601	1-123-875-11	(E,EA,AUS).....ELECT	10MF	20%	50V			
C601	1-124-994-11	(AEP,UK,WG,IT)...ELECT	100MF	20%	10V			
C602	1-123-875-11	(E,EA,AUS).....ELECT	10MF	20%	50V			
C602	1-124-994-11	(AEP,UK,WG,IT)...ELECT	100MF	20%	10V			
C603	1-131-587-11	TANTALUM	0.68MF	10%	35V			
C604	1-131-587-11	TANTALUM	0.68MF	10%	35V			
C605	1-126-024-11	ELECT	220MF	20%	16V			
C701	1-126-161-11	ELECT	2.2MF	20%	50V			
C702	1-126-161-11	ELECT	2.2MF	20%	50V			
C703	1-124-994-11	ELECT	100MF	20%	10V			
C704	1-161-494-00	CERAMIC	0.022MF		25V			
C801	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C802	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C803	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C804	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C805	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C806	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C807	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C808	1-162-286-31	(WG,IT)...CERAMIC	220PF	10%	50V			
C810	1-161-379-00	(WG,IT)...CERAMIC	0.01MF	30%	16V			
C812	1-161-379-00	(WG,IT)...CERAMIC	0.01MF	30%	16V			
C821	1-136-163-00	(WG,IT)...FILM	0.068MF	5%	50V			
C822	1-136-163-00	(WG,IT)...FILM	0.068MF	5%	50V			
C823	1-136-163-00	(WG,IT)...FILM	0.068MF	5%	50V			
C824	1-136-163-00	(WG,IT)...FILM	0.068MF	5%	50V			
C825	1-162-294-31	(WG,IT)...CERAMIC	0.001MF	10%	50V			
C826	1-162-294-31	(WG,IT)...CERAMIC	0.001MF	10%	50V			
C827	1-162-294-31	(WG,IT)...CERAMIC	0.001MF	10%	50V			
C830	1-136-165-00	(WG,IT)...FILM	0.1MF	5%	50V			
C831	1-136-165-00	(WG,IT)...FILM	0.1MF	5%	50V			
C901	1-102-394-11	CERAMIC	0.01MF		250V			
C902	1-126-224-11	(AEP,UK,WG,IT)...ELECT	4700MF	20%	42V			
C902	1-126-258-11	(E,EA,AUS).....ELECT	4700MF	20%	50V			
C903	1-126-224-11	(AEP,UK,WG,IT)...ELECT	4700MF	20%	42V			
C903	1-126-258-11	(E,EA,AUS).....ELECT	4700MF	20%	50V			
C904	1-124-564-11	ELECT	4700MF	20%	25V			
C905	1-124-564-11	ELECT	4700MF	20%	25V			
C906	1-136-742-11	FILM	0.1MF	5%	50V			
C907	1-136-742-11	FILM	0.1MF	5%	50V			
C908	1-124-473-11	ELECT	1000MF	20%	10V			
C909	1-136-742-11	FILM	0.1MF	5%	50V			
C910	1-136-742-11	FILM	0.1MF	5%	50V			
C911	1-124-473-11	ELECT	1000MF	20%	10V			
C912	1-136-742-11	FILM	0.1MF	5%	50V			
C913	1-136-742-11	FILM	0.1MF	5%	50V			
C914	1-124-471-00	ELECT	1000MF	20%	6.3V			
C915	1-136-742-11	(UK,E2)...FILM	0.1MF	5%	50V			
C916	1-126-025-11	(UK)....ELECT	330MF	20%	16V			
C916	1-126-103-11	(E2)....ELECT	470MF	20%	16V			
C917	1-136-742-11	(E,EA,AUS)...FILM	0.1MF	5%	50V			
C918	1-124-045-00	ELECT	4.7MF	20%	50V			
C919	1-126-233-11	(E,EA,AUS)...ELECT	22MF	20%	50V			
C920	1-161-744-00	CERAMIC	0.01MF		400V			
C921	1-123-875-11	(E,EA,AUS)...ELECT	10MF	20%	50V			
C922	1-102-394-11	CERAMIC	0.01MF		250V			
C923	1-124-443-00	(E,EA,AUS)...ELECT	100MF	20%	6.3V			
C999	1-101-004-00	CERAMIC	0.01MF		50V			
CN1	1-562-327-00	SOCKET, CONNECTOR 3P						
CN2	1-562-327-00	SOCKET, CONNECTOR 3P						
CN3	1-562-327-00	SOCKET, CONNECTOR 3P						
CN101	1-507-981-11	JACK (LARGE TYPE)(HEADPHONES)						
CN102	*1-564-508-11	PLUG, CONNECTOR 5P						
CN110	*1-566-856-11	SOCKET, CONNECTOR 5P (ONLY FOR ST-V502)						
CN111	1-507-911-11	JACK, PIN 6P (PHONO/VIDEO/CD)						
CN112	1-507-997-11	JACK, PIN 2P (SURROUND SPEAKER)						
CN113	1-537-240-31	TERMINAL BOARD (CHECKER PIN)(SPEAKER)						
CN114	*1-566-210-11	(UK,E2)...PIN, CONNECTOR 3P (ONLY FOR PS-V702)						
CN115	*1-568-865-11	SOCKET, CONNECTOR 23P						
CN116	*1-568-839-11	SOCKET, CONNECTOR 23P						
CN118	*1-564-508-11	PLUG, CONNECTOR 5P						
CN121	1-569-402-11	PLUG, CONNECTOR 6P						
CN122	1-569-400-11	PLUG, CONNECTOR 10P						
CN123	1-569-400-11	PLUG, CONNECTOR 10P						
CN128	*1-564-508-11	PLUG, CONNECTOR 5P						
CN131	1-569-408-11	SOCKET, CONNECTOR 6P						
CN132	1-569-406-11	SOCKET, CONNECTOR 10P						
CN133	1-569-406-11	SOCKET, CONNECTOR 10P						
CN401	1-565-117-11	JACK, LARGE TYPE (MIC)						
CN403	*1-568-451-11	(E,EA,AUS)...HOUSING, CONNECTOR (PC BOARD) 10P						
CN404	*1-569-488-11	(E,EA,AUS)...PIN, CONNECTOR (PC BOARD) 10P						
CN601	*1-564-340-61	PIN, CONNECTOR 6P						
CN602	*1-564-339-61	PIN, CONNECTOR 5P						
CN603	*1-564-339-00	PIN, CONNECTOR 5P						
CN701	*1-568-865-11	SOCKET, CONNECTOR 23P						
CN702	*1-568-839-11	SOCKET, CONNECTOR 23P						
CN703	*1-564-342-11	PIN, CONNECTOR 8P						
CN704	*1-564-342-61	PIN, CONNECTOR 8P						
CN705	*1-564-337-00	PIN, CONNECTOR 3P						
CN706	*1-564-337-61	PIN, CONNECTOR 3P						

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
CN707	*1-565-042-11	HOUSING, CONNECTOR (PC BOARD) 5P	D476	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
CN901	*1-564-321-00	PIN, CONNECTOR 2P	D477	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
CN902	*1-560-595-00	TERMINAL (WITH BASE)	D478	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
CNP11A	1-564-501-11	PIN, CONNECTOR 8P	D479	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
CNP11B	1-564-501-11	PIN, CONNECTOR 8P	D480	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
CNP12A	*1-564-337-00	PIN, CONNECTOR 3P	D481	8-719-912-20	(E,EA,AUS)...DIODE 1SS120
CNP12B	*1-564-337-61	PIN, CONNECTOR 3P	D482	8-719-933-38	(E,EA,AUS)...DIODE HZS6B3L
CNP13A	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	D501	8-719-301-39	DIODE SEL2210S
CNP13B	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	D502	8-719-301-39	DIODE SEL2210S
CNP81A	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	D503	8-719-301-44	DIODE SEL2410E-D
CNP81B	*1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	D504	8-719-301-44	DIODE SEL2410E-D
CNP82A	*1-564-339-00	PIN, CONNECTOR 5P	D505	8-719-301-44	DIODE SEL2410E-D
CNP82B	*1-564-339-61	PIN, CONNECTOR 5P	D551	8-719-301-39	DIODE SEL2210S
CNP83	*1-564-340-61	PIN, CONNECTOR 6P	D552	8-719-301-39	DIODE SEL2210S
CP451	1-233-081-11	(E,EA,AUS)...COMPOSITION CIRCUIT BLOCK 100KX7	D553	8-719-301-44	DIODE SEL2410E-D
CP452	1-233-081-11	(E,EA,AUS)...COMPOSITION CIRCUIT BLOCK 100KX7	D554	8-719-301-44	DIODE SEL2410E-D
CP453	1-233-081-11	(E,EA,AUS)...COMPOSITION CIRCUIT BLOCK 100KX7	D555	8-719-301-44	DIODE SEL2410E-D
D11A	8-719-107-94	DIODE 1SS202-1	D601	8-719-933-50	DIODE HZS7C2L
D11B	8-719-107-94	DIODE 1SS202-1	D602	8-719-933-50	DIODE HZS7C2L
D81	8-719-107-94	DIODE 1SS202-1	D701A	8-719-200-77	DIODE 10E2N
D180	8-719-912-20	DIODE 1SS120	D701B	8-719-301-39	DIODE SEL2210S
D190	8-719-912-20	DIODE 1SS120	D702A	8-719-200-77	DIODE 10E2N
D191	8-719-912-20	DIODE 1SS120	D702B	8-719-301-39	DIODE SEL2210S
D192	8-719-912-20	DIODE 1SS120	D703A	8-719-912-20	DIODE 1SS120
D280	8-719-912-20	DIODE 1SS120	D703B	8-719-301-61	DIODE SEL2910A-D
D301	8-719-912-20	DIODE 1SS120	D704A	8-719-912-20	DIODE 1SS120
D302	8-719-912-20	DIODE 1SS120	D704B	8-719-301-61	DIODE SEL2910A-D
D303	8-719-912-20	DIODE 1SS120	D705A	8-719-912-20	DIODE 1SS120
D304	8-719-912-20	DIODE 1SS120	D705B	8-719-301-44	DIODE SEL2410E-D
D305	8-719-912-20	DIODE 1SS120	D706	8-719-301-61	DIODE SEL2910A-D
D306	8-719-912-20	DIODE 1SS120	D707	8-719-301-61	DIODE SEL2910A-D
D307	8-719-912-20	DIODE 1SS120	D708	8-719-301-44	DIODE SEL2410E-D
D308	8-719-942-33	DIODE HZ3CLL	D709	8-719-301-61	DIODE SEL2910A-D
D309	8-719-912-20	DIODE 1SS120	D710	8-719-301-39	DIODE SEL2210S
D310	8-719-912-20	DIODE 1SS120	D901	8-719-302-38	DIODE RBV-602-01
D311	8-719-975-60	DIODE SLP9070	D902	8-719-200-77	DIODE 10E2N
D312	8-719-975-60	DIODE SLP9070	D903	8-719-200-77	DIODE 10E2N
D314	8-719-975-60	DIODE SLP9070 (PHONO)	D904	8-719-200-77	DIODE 10E2N
D315	8-719-975-60	DIODE SLP9070 (TUNER)	D905	8-719-200-77	DIODE 10E2N
D316	8-719-975-60	DIODE SLP9070 (CD)	D906	8-719-210-21	DIODE 11EQS04
D317	8-719-975-60	DIODE SLP9070 (TAPE)	D907	8-719-210-21	DIODE 11EQS04
D318	8-719-975-60	DIODE SLP9070 (AUX)	D908	8-719-934-23	(E,EA,AUS)...DIODE HZS30-3L
D319	8-719-301-39	DIODE SEL2210S	D909	8-719-014-60	(E,EA,AUS)...DIODE UZP-5.1BB
D320	8-719-301-39	DIODE SEL2210S	D910	8-719-200-77	DIODE 10E2N
D321	8-719-912-20	DIODE 1SS120	F901	△1-532-286-00	FUSE T2.5A
D322	8-719-912-20	DIODE 1SS120	F902	△1-532-286-00	FUSE T2.5A
D470	8-719-912-20	(E,EA,AUS)...DIODE 1SS120	F920	△1-532-388-51	FUSE T2A
D471	8-719-912-20	(E,EA,AUS)...DIODE 1SS120	F921	△1-532-388-51	(E,EA,AUS)...FUSE T2A
D472	8-719-912-20	(E,EA,AUS)...DIODE 1SS120	FL450	1-519-486-21	(E,EA,AUS)...INDICATOR TUBE, FLORESCENT
D473	8-719-912-20	(E,EA,AUS)...DIODE 1SS120	HP1	A-2108-122-C	(DECK A)...CHASSIS ASSY, HEAD
D474	8-719-912-20	(E,EA,AUS)...DIODE 1SS120	HRPE1	A-2108-123-C	(DECK B)...CHASSIS ASSY, HEAD
D475	8-719-912-20	(E,EA,AUS)...DIODE 1SS120	IC81A	8-759-111-44	IC UPC4570C-1
			IC81B	8-759-111-44	IC UPC4570C-1
			IC101	8-759-208-06	IC TC4051BPHB
			IC105	8-759-634-51	IC M5218AP
			IC130	8-759-634-50	IC M5218AL

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
IC131	8-759-634-51	IC M5218AP
IC132	8-759-000-49	IC MC14066BCP
IC133	8-759-602-04	IC M5226P
IC170	8-749-941-52	{AEP,UK,WG,IT)...IC STK415211
IC170	8-759-111-68	{E,EA,AUS).....IC STK4192MK2
IC190	8-759-111-68	IC UPC1237HA
IC201	8-759-208-06	IC TC4051BPHB
IC233	8-759-602-04	IC M5226P
IC301	8-759-149-27	IC UPD75004CU-058
IC302	8-759-820-62	IC LB1639
IC401	8-759-634-51	IC M5218AP
IC450	8-759-820-07	{E,EA,AUS)...IC LC7566
IC470	8-759-634-51	{E,EA,AUS)...IC M5218AP
IC471	8-759-634-51	{E,EA,AUS)...IC M5218AP
IC472	8-759-634-51	{E,EA,AUS)...IC M5218AP
IC501	8-759-040-53	IC MC14053BCP
IC502	8-759-917-42	IC IR2E31A
IC551	8-759-040-53	IC MC14053BCP
IC552	8-759-917-42	IC IR2E31A
IC601	8-759-208-08	IC TC4052BPHB
IC602	8-752-033-61	IC CXA1198AP
IC603	8-752-031-67	IC CXA1100P
IC604	8-759-634-50	IC M5218AL
IC701	8-759-635-20	IC M50964-225SP
IC901	8-759-604-86	IC M5F7807
IC902	8-759-604-90	IC M5F7907
IC903	8-759-604-29	IC M5F7805
IC904	8-759-604-33	{UK,E2)...IC M5F7812
L41	1-410-780-11	INDUCTOR 27MMH
L61	1-410-780-11	INDUCTOR 27MMH
L601	1-410-521-11	INDUCTOR 100UH
L602	1-410-521-11	INDUCTOR 100UH
M1	X-3343-447-1	{DECK A)...MOTOR ASSY
M2	X-3343-447-1	{DECK B)...MOTOR ASSY
PM1	1-454-456-11	{DECK A)...SOLENOID, PLUNGER
PM2	1-454-456-11	{DECK B)...SOLENOID, PLUNGER
Q11A	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q11B	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q12A	8-719-939-23	PHOTO SENSOR GP2S09-C
Q12B	8-719-939-23	PHOTO SENSOR GP2S09-C
Q81	8-729-111-29	TRANSISTOR 2SD1616A-K
Q82	8-729-194-57	TRANSISTOR 2SC945-P
Q83	8-729-194-57	TRANSISTOR 2SC945-P
Q132	8-729-620-05	TRANSISTOR 2SC2603-EF
Q133	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q180	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA
Q190	8-729-900-63	TRANSISTOR DTA114ES
Q232	8-729-620-05	TRANSISTOR 2SC2603-EF
Q233	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q280	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA
Q301	8-729-620-05	TRANSISTOR 2SC2603-EF
Q302	8-729-620-05	TRANSISTOR 2SC2603-EF
Q303	8-729-900-80	TRANSISTOR DTC114ES
Q305	8-729-620-05	TRANSISTOR 2SC2603-EF
Q306	8-729-900-65	TRANSISTOR DTA114ES

Ref.No.	Part No.	Description
Q307	8-729-900-65	TRANSISTOR DTA114ES
Q308	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF
Q502	8-729-620-05	TRANSISTOR 2SC2603-EF
Q504	8-729-900-80	{E,EA,AUS)...TRANSISTOR DTC114ES
Q551	8-729-620-05	TRANSISTOR 2SC2603-EF
Q552	8-729-620-05	TRANSISTOR 2SC2603-EF
Q554	8-729-900-80	{E,EA,AUS)...TRANSISTOR DTC114ES
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q701	8-729-900-61	TRANSISTOR DTA114ES
Q702	8-729-801-93	TRANSISTOR 2SD1387
Q703	8-729-801-84	TRANSISTOR 2SB1013-4
Q704	8-729-900-61	TRANSISTOR DTA114ES
Q705	8-729-801-93	TRANSISTOR 2SD1387
Q706	8-729-801-84	TRANSISTOR 2SB1013-4
Q707	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q708	8-729-118-01	TRANSISTOR 2SB1116
Q709	8-729-900-61	TRANSISTOR DTA114ES
Q710	8-729-620-05	TRANSISTOR 2SC2603-EF
Q711	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q712	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q713	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q714	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q715	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q716	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q717	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q718	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q719	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q720	8-729-900-61	TRANSISTOR DTA114ES
Q722	8-729-900-61	{E,EA,AUS)...TRANSISTOR DTA114ES
Q901	8-729-804-68	{E,EA,AUS)...TRANSISTOR 2SB1133-R
R11	1-247-834-11	CARBON 1.3K 5% 1/4W
R12	1-249-414-11	CARBON 560 5% 1/4W
R13	1-247-818-11	CARBON 300 5% 1/4W
R14A	1-249-408-11	CARBON 180 5% 1/4W
R14B	1-249-408-11	CARBON 180 5% 1/4W
R17A	1-249-437-11	CARBON 47K 5% 1/4W
R17B	1-249-437-11	CARBON 47K 5% 1/4W
R18A	1-249-437-11	CARBON 47K 5% 1/4W
R18B	1-249-437-11	CARBON 47K 5% 1/4W
R41A	1-247-881-00	CARBON 120K 5% 1/4W
R41B	1-247-881-00	CARBON 120K 5% 1/4W
R42A	1-249-405-11	CARBON 100 5% 1/4W
R42B	1-249-405-11	CARBON 100 5% 1/4W
R43A	1-247-882-11	CARBON 130K 5% 1/4W
R43B	1-247-882-11	CARBON 130K 5% 1/4W
R44A	1-249-426-11	CARBON 5.6K 5% 1/4W
R44B	1-249-426-11	CARBON 5.6K 5% 1/4W
R45	1-249-430-11	CARBON 12K 5% 1/4W
R61A	1-247-881-00	CARBON 120K 5% 1/4W
R61B	1-247-881-00	CARBON 120K 5% 1/4W
R62A	1-249-405-11	CARBON 100 5% 1/4W
R62B	1-249-405-11	CARBON 100 5% 1/4W
R63A	1-247-882-11	CARBON 130K 5% 1/4W
R63B	1-247-882-11	CARBON 130K 5% 1/4W

Ref.No.	Part No.	Description			
R64A	1-249-426-11	CARBON	5.6K	5%	1/4W
R64B	1-249-426-11	CARBON	5.6K	5%	1/4W
R65	1-249-430-11	CARBON	12K	5%	1/4W
R81A	1-249-409-11	CARBON	220	5%	1/4W
R81B	1-249-409-11	CARBON	220	5%	1/4W
R82A	1-249-409-11	CARBON	220	5%	1/4W
R82B	1-249-409-11	CARBON	220	5%	1/4W
R83	1-249-429-11	CARBON	10K	5%	1/4W
R84	△ 1-212-853-00	FUSIBLE	6.8	5%	1/4W F
R85	1-249-434-11	CARBON	27K	5%	1/4W
R86	1-249-434-11	CARBON	27K	5%	1/4W
R101	1-249-417-11	CARBON	1K	5%	1/4W
R102	1-249-441-11	CARBON	100K	5%	1/4W
R103	1-249-441-11	CARBON	100K	5%	1/4W
R106	1-249-437-11	CARBON	47K	5%	1/4W
R107	1-247-897-11	CARBON	560K	5%	1/4W
R108	1-249-416-11	CARBON	820	5%	1/4W
R109	1-249-409-11	CARBON	220	5%	1/4W
R110	1-249-441-11	CARBON	100K	5%	1/4W
R111	1-249-429-11	CARBON	10K	5%	1/4W
R112	1-247-868-11	CARBON	36K	5%	1/4W
R113	1-249-417-11	CARBON	1K	5%	1/4W
R114	1-247-897-11	CARBON	560K	5%	1/4W
R115	1-249-417-11	CARBON	1K	5%	1/4W
R116	1-247-897-11	CARBON	560K	5%	1/4W
R131	1-249-437-11	CARBON	47K	5%	1/4W
R132	1-249-437-11	CARBON	47K	5%	1/4W
R133	1-249-437-11	CARBON	47K	5%	1/4W
R134	1-249-441-11	CARBON	100K	5%	1/4W
R135	1-249-424-11	CARBON	3.9K	5%	1/4W
R136	1-249-429-11	CARBON	10K	5%	1/4W
R137	1-249-426-11	CARBON	5.6K	5%	1/4W
R138	1-249-422-11	CARBON	2.7K	5%	1/4W
R139	1-249-422-11	CARBON	2.7K	5%	1/4W
R140	1-249-441-11	CARBON	100K	5%	1/4W
R141	1-249-427-11	CARBON	6.8K	5%	1/4W
R142	1-249-412-11	CARBON	390	5%	1/4W
R143	1-249-425-11	CARBON	4.7K	5%	1/4W
R145	1-249-421-11	CARBON	2.2K	5%	1/4W
R146	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W
R147	1-249-429-11	CARBON	10K	5%	1/4W
R148	1-249-441-11	CARBON	100K	5%	1/4W
R149	1-249-425-11	CARBON	4.7K	5%	1/4W
R171	1-249-417-11	CARBON	1K	5%	1/4W
R172	1-249-438-11	CARBON	56K	5%	1/4W
R173	1-249-414-11	CARBON	560	5%	1/4W
R174	1-249-438-11	CARBON	56K	5%	1/4W
R175	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W
R175	1-247-758-11	(E,EA,AUS).....CARBON	3.3K	5%	1/2W
R176	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W
R176	1-247-758-11	(E,EA,AUS).....CARBON	3.3K	5%	1/2W
R177	△ 1-212-881-11	FUSIBLE	100	5%	1/4W F
R178	1-247-752-11	CARBON	1K	5%	1/2W
R179	1-247-752-11	CARBON	1K	5%	1/2W

Ref.No.	Part No.	Description			
R180	1-217-156-00	METAL PLATE	0.22	10%	5W
R181	1-249-417-11	CARBON	1K	5%	1/4W
R182	1-249-431-11	CARBON	15K	5%	1/4W
R183	1-249-441-11	CARBON	100K	5%	1/4W
R184	1-247-727-11	CARBON	10	5%	1/2W
R186	1-249-437-11	CARBON	47K	5%	1/4W
R187	1-247-745-11	CARBON	330	5%	1/2W
R190	△ 1-216-431-11	(AEP,UK,WG,IT)...METAL OXIDE	560	5%	1W F
R190	△ 1-216-432-11	(E,EA,AUS).....METAL OXIDE	820	5%	1W F
R191	△ 1-249-486-11	(AEP,UK,WG,IT)...CARBON	12K	5%	1/2W
R191	△ 1-249-487-11	(E,EA,AUS).....CARBON	15K	5%	1/2W
R192	1-249-436-11	CARBON	39K	5%	1/4W
R193	1-249-441-11	CARBON	100K	5%	1/4W
R194	1-249-429-11	CARBON	10K	5%	1/4W
R201	1-249-417-11	CARBON	1K	5%	1/4W
R202	1-249-441-11	CARBON	100K	5%	1/4W
R203	1-249-441-11	CARBON	100K	5%	1/4W
R206	1-249-437-11	CARBON	47K	5%	1/4W
R207	1-247-897-11	CARBON	560K	5%	1/4W
R208	1-249-416-11	CARBON	820	5%	1/4W
R209	1-249-409-11	CARBON	220	5%	1/4W
R210	1-249-441-11	CARBON	100K	5%	1/4W
R211	1-249-429-11	CARBON	10K	5%	1/4W
R212	1-247-868-11	CARBON	36K	5%	1/4W
R213	1-249-417-11	CARBON	1K	5%	1/4W
R214	1-247-897-11	CARBON	560K	5%	1/4W
R215	1-249-417-11	CARBON	1K	5%	1/4W
R216	1-247-897-11	CARBON	560K	5%	1/4W
R231	1-249-437-11	CARBON	47K	5%	1/4W
R232	1-249-437-11	CARBON	47K	5%	1/4W
R233	1-249-437-11	CARBON	47K	5%	1/4W
R234	1-249-441-11	CARBON	100K	5%	1/4W
R235	1-249-424-11	CARBON	3.9K	5%	1/4W
R236	1-249-429-11	CARBON	10K	5%	1/4W
R237	1-249-426-11	CARBON	5.6K	5%	1/4W
R238	1-249-422-11	CARBON	2.7K	5%	1/4W
R239	1-249-422-11	CARBON	2.7K	5%	1/4W
R240	1-249-441-11	CARBON	100K	5%	1/4W
R241	1-249-427-11	CARBON	6.8K	5%	1/4W
R242	1-249-412-11	CARBON	390	5%	1/4W
R243	1-249-425-11	CARBON	4.7K	5%	1/4W
R245	1-249-421-11	CARBON	2.2K	5%	1/4W
R246	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W
R247	1-249-429-11	CARBON	10K	5%	1/4W
R248	1-249-441-11	CARBON	100K	5%	1/4W
R249	1-249-425-11	CARBON	4.7K	5%	1/4W
R271	1-249-417-11	CARBON	1K	5%	1/4W
R272	1-249-438-11	CARBON	56K	5%	1/4W
R273	1-249-414-11	CARBON	560	5%	1/4W
R274	1-249-438-11	CARBON	56K	5%	1/4W
R275	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W
R275	1-247-758-11	(E,EA,AUS).....CARBON	3.3K	5%	1/2W
R276	1-247-756-11	(AEP,UK,WG,IT)...CARBON	2.2K	5%	1/2W
R276	1-247-758-11	(E,EA,AUS).....CARBON	3.3K	5%	1/2W
R277	△ 1-212-881-11	FUSIBLE	100	5%	1/4W F
R280	1-217-156-00	METAL PLATE	0.22	10%	5W
R281	1-249-417-11	CARBON	1K	5%	1/4W

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description					
R282	1-249-431-11	CARBON	15K	5%	1/4W		
R283	1-249-441-11	CARBON	100K	5%	1/4W		
R284	1-247-727-11	CARBON	10	5%	1/2W		
R286	1-249-438-11	CARBON	56K	5%	1/4W		
R287	1-247-745-11	CARBON	330	5%	1/2W		
R301	1-249-418-11	CARBON	1.2K	5%	1/4W		
R302	1-249-429-11	CARBON	10K	5%	1/4W		
R303	1-249-441-11	CARBON	100K	5%	1/4W		
R304	1-249-429-11	CARBON	10K	5%	1/4W		
R305	1-249-429-11	CARBON	10K	5%	1/4W		
R307	1-249-433-11	CARBON	22K	5%	1/4W		
R308	1-249-433-11	CARBON	22K	5%	1/4W		
R309	1-249-433-11	CARBON	22K	5%	1/4W		
R310	1-249-433-11	CARBON	22K	5%	1/4W		
R311	1-249-409-11	CARBON	220	5%	1/4W		
R312	1-249-409-11	CARBON	220	5%	1/4W		
R314	1-249-411-11	CARBON	330	5%	1/4W		
R315	1-249-417-11	CARBON	1K	5%	1/4W		
R316	1-249-417-11	CARBON	1K	5%	1/4W		
R319	1-249-429-11	(E,EA,AUS)...CARBON	10K	5%	1/4W		
R320	1-249-437-11	CARBON	47K	5%	1/4W		
R321	1-249-429-11	CARBON	10K	5%	1/4W		
R322	1-249-409-11	CARBON	220	5%	1/4W		
R323	1-249-409-11	CARBON	220	5%	1/4W		
R324	1-249-409-11	(E,EA,AUS)...CARBON	220	5%	1/4W		
R325	1-249-409-11	(E,EA,AUS)...CARBON	220	5%	1/4W		
R329	1-249-429-11	CARBON	10K	5%	1/4W		
R330	1-249-429-11	CARBON	10K	5%	1/4W		
R331	1-249-429-11	CARBON	10K	5%	1/4W		
R401	1-249-417-11	CARBON	1K	5%	1/4W		
R402	1-249-429-11	(E,EA,AUS).....CARBON	10K	5%	1/4W		
R402	1-249-441-11	(AEP,UK,WG,IT)...CARBON	100K	5%	1/4W		
R403	1-249-441-11	CARBON	100K	5%	1/4W		
R404	1-249-410-11	CARBON	270	5%	1/4W		
R405	1-249-429-11	(AEP,UK,WG,IT)...CARBON	10K	5%	1/4W		
R405	1-249-441-11	(E,EA,AUS).....CARBON	100K	5%	1/4W		
R406	1-249-416-11	CARBON	820	5%	1/4W		
R451	1-249-432-11	(E,EA,AUS)...CARBON	18K	5%	1/4W		
R452	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R453	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R454	1-247-903-11	(E,EA,AUS)...CARBON	1M	5%	1/4W		
R470	1-249-417-11	(E,EA,AUS)...CARBON	1K	5%	1/4W		
R471	1-247-885-00	(E,EA,AUS)...CARBON	180K	5%	1/4W		
R472	1-249-429-11	(E,EA,AUS)...CARBON	10K	5%	1/4W		
R473	1-249-405-11	(E,EA,AUS)...CARBON	100	5%	1/4W		
R474	1-249-412-11	(E,EA,AUS)...CARBON	390	5%	1/4W		
R475	1-249-423-11	(E,EA,AUS)...CARBON	3.3K	5%	1/4W		
R476	1-249-439-11	(E,EA,AUS)...CARBON	68K	5%	1/4W		
R477	1-247-899-11	(E,EA,AUS)...CARBON	680K	5%	1/4W		
R478	1-247-903-11	(E,EA,AUS)...CARBON	1M	5%	1/4W		
R480	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R481	1-249-439-11	(E,EA,AUS)...CARBON	68K	5%	1/4W		
R482	1-249-426-11	(E,EA,AUS)...CARBON	5.6K	5%	1/4W		
R483	1-249-413-11	(E,EA,AUS)...CARBON	470	5%	1/4W		
R484	1-247-901-11	(E,EA,AUS)...CARBON	820K	5%	1/4W		
R485	1-249-440-11	(E,EA,AUS)...CARBON	82K	5%	1/4W		
R486	1-249-423-11	(E,EA,AUS)...CARBON	3.3K	5%	1/4W		
R487	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R488	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R489	1-247-887-00	(E,EA,AUS)...CARBON	220K	5%	1/4W		
R490	1-249-433-11	(E,EA,AUS)...CARBON	22K	5%	1/4W		
R491	1-249-417-11	(E,EA,AUS)...CARBON	1K	5%	1/4W		
R492	1-247-903-11	(E,EA,AUS)...CARBON	1M	5%	1/4W		
R493	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R494	1-249-423-11	(E,EA,AUS)...CARBON	3.3K	5%	1/4W		
R495	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R496	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R497	1-249-417-11	(E,EA,AUS)...CARBON	1K	5%	1/4W		
R498	1-249-441-11	(E,EA,AUS)...CARBON	100K	5%	1/4W		
R499	1-249-409-11	(E,EA,AUS)...CARBON	220	5%	1/4W		
R501	1-249-420-11	CARBON	1.8K	5%	1/4W		
R502	1-249-437-11	CARBON	47K	5%	1/4W		
R503	1-249-422-11	CARBON	2.7K	5%	1/4W		
R504	1-249-441-11	CARBON	100K	5%	1/4W		
R506	1-249-408-11	(E,EA,AUS)...CARBON	180	5%	1/4W		
R507	1-247-850-11	(E,EA,AUS).....CARBON	6.2K	5%	1/4W		
R507	1-249-419-11	(AEP,UK,WG,IT)...CARBON	1.5K	5%	1/4W		
R508	1-249-421-11	CARBON	2.2K	5%	1/4W		
R509	1-249-425-11	CARBON	4.7K	5%	1/4W		
R510	1-249-429-11	CARBON	10K	5%	1/4W		
R511	1-249-411-11	CARBON	330	5%	1/4W		
R512	1-249-426-11	CARBON	5.6K	5%	1/4W		
R513	1-249-425-11	CARBON	4.7K	5%	1/4W		
R514	1-249-429-11	CARBON	10K	5%	1/4W		
R515	1-249-421-11	CARBON	2.2K	5%	1/4W		
R516	1-249-440-11	CARBON	82K	5%	1/4W		
R520	1-249-437-11	CARBON	47K	5%	1/4W		
R521	1-247-854-11	CARBON	9.1K	5%	1/4W		
R522	1-249-407-11	CARBON	150	5%	1/4W		
R551	1-249-420-11	CARBON	1.8K	5%	1/4W		
R552	1-249-437-11	CARBON	47K	5%	1/4W		
R553	1-249-422-11	CARBON	2.7K	5%	1/4W		
R554	1-249-441-11	CARBON	100K	5%	1/4W		
R556	1-249-408-11	(E,EA,AUS)...CARBON	180	5%	1/4W		
R557	1-247-850-11	(E,EA,AUS).....CARBON	6.2K	5%	1/4W		
R557	1-249-419-11	(AEP,UK,WG,IT)...CARBON	1.5K	5%	1/4W		
R558	1-249-421-11	CARBON	2.2K	5%	1/4W		
R559	1-249-425-11	CARBON	4.7K	5%	1/4W		
R560	1-249-429-11	CARBON	10K	5%	1/4W		
R561	1-249-411-11	CARBON	330	5%	1/4W		
R562	1-249-426-11	CARBON	5.6K	5%	1/4W		
R563	1-249-425-11	CARBON	4.7K	5%	1/4W		
R564	1-249-429-11	CARBON	10K	5%	1/4W		
R565	1-249-421-11	CARBON	2.2K	5%	1/4W		
R566	1-249-440-11	CARBON	82K	5%	1/4W		
R570	1-249-437-11	CARBON	47K	5%	1/4W		
R571	1-247-854-11	CARBON	9.1K	5%	1/4W		
R601	1-249-433-11	CARBON	22K	5%	1/4W		
R602	1-249-433-11	CARBON	22K	5%	1/4W		
R603	1-249-433-11	CARBON	22K	5%	1/4W		
R604	1-215-460-00	METAL	43K	1%	1/6W		

Ref.No.	Part No.	Description
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R605	1-249-437-11	CARBON	47K	5%	1/4W
R606	1-249-437-11	CARBON	47K	5%	1/4W
R609	1-247-864-11	CARBON	24K	5%	1/4W
R611	1-249-437-11	CARBON	47K	5%	1/4W
R612	1-249-435-11	CARBON	33K	5%	1/4W
R613	1-247-868-11	CARBON	36K	5%	1/4W
R614	1-247-878-00	CARBON	91K	5%	1/4W
R615	1-247-881-00	CARBON	120K	5%	1/4W
R616	1-249-437-11	CARBON	47K	5%	1/4W
R617	1-247-862-11	CARBON	20K	5%	1/4W
R618	1-247-868-11	CARBON	36K	5%	1/4W
R619	1-249-436-11	CARBON	39K	5%	1/4W
R620	1-247-876-11	CARBON	75K	5%	1/4W
R621	1-247-868-11	CARBON	36K	5%	1/4W
R622	1-247-878-00	CARBON	91K	5%	1/4W
R623	1-247-876-11	CARBON	75K	5%	1/4W
R624	1-249-437-11	CARBON	47K	5%	1/4W
R625	1-247-866-11	CARBON	30K	5%	1/4W
R626	1-247-878-00	CARBON	91K	5%	1/4W
R627	1-247-881-00	CARBON	120K	5%	1/4W
R628	1-247-876-11	CARBON	75K	5%	1/4W
R629	1-247-868-11	CARBON	36K	5%	1/4W
R630	1-249-438-11	CARBON	56K	5%	1/4W
R631	1-249-433-11	CARBON	22K	5%	1/4W
R632	1-249-434-11	CARBON	27K	5%	1/4W
R633	1-249-440-11	CARBON	82K	5%	1/4W
R634	1-249-440-11	CARBON	82K	5%	1/4W
R635	1-249-429-11	CARBON	10K	5%	1/4W
R636	1-249-429-11	CARBON	10K	5%	1/4W
R637	1-249-425-11	CARBON	4.7K	5%	1/4W
R638	1-247-854-11	CARBON	9.1K	5%	1/4W
R639	1-249-433-11	CARBON	22K	5%	1/4W
R640	1-249-433-11	CARBON	22K	5%	1/4W
R641	1-249-405-11	CARBON	100	5%	1/4W
R642	1-249-405-11	CARBON	100	5%	1/4W
R703	1-249-421-11	CARBON	2.2K	5%	1/4W
R704	1-249-429-11	CARBON	10K	5%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W
R706	1-249-429-11	CARBON	10K	5%	1/4W
R707	1-249-437-11	CARBON	47K	5%	1/4W
R708	1-249-433-11	CARBON	22K	5%	1/4W
R709	1-249-429-11	CARBON	10K	5%	1/4W
R712	1-249-421-11	CARBON	2.2K	5%	1/4W
R713	1-249-429-11	CARBON	10K	5%	1/4W
R714	1-249-417-11	CARBON	1K	5%	1/4W
R715	1-249-429-11	CARBON	10K	5%	1/4W
R716	1-249-437-11	CARBON	47K	5%	1/4W
R717	1-249-417-11	CARBON	1K	5%	1/4W
R718	1-249-417-11	CARBON	1K	5%	1/4W
R719	1-249-425-11	CARBON	4.7K	5%	1/4W
R720	1-249-425-11	CARBON	4.7K	5%	1/4W
R723	1-247-895-00	CARBON	470K	5%	1/4W
R724	1-247-895-00	CARBON	470K	5%	1/4W
R727	1-249-429-11	CARBON	10K	5%	1/4W
R728	1-247-903-00	CARBON	1M	5%	1/4W
R729	1-249-429-11	CARBON	10K	5%	1/4W
R730	1-249-423-11	CARBON	3.3K	5%	1/4W



Ref.No.	Part No.	Description
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R731	1-249-429-11	CARBON	10K	5%	1/4W
R732	1-249-421-11	CARBON	2.2K	5%	1/4W
R733	1-249-421-11	CARBON	2.2K	5%	1/4W
R734	1-249-421-11	CARBON	2.2K	5%	1/4W
R737	1-249-429-11	CARBON	10K	5%	1/4W
R738	1-249-429-11	(AEP,UK,WG,IT)...CARBON	10K	5%	1/4W
R738	1-249-441-11	(E,EA,AUS).....CARBON	100K	5%	1/4W
R739	1-249-429-11	(AEP,UK,WG,IT)...CARBON	10K	5%	1/4W
R739	1-249-441-11	(E,EA,AUS).....CARBON	100K	5%	1/4W
R740	1-249-409-11	CARBON	220	5%	1/4W
R741	1-249-409-11	CARBON	220	5%	1/4W
R742	1-249-411-11	CARBON	330	5%	1/4W
R743	1-249-411-11	CARBON	330	5%	1/4W
R744	1-249-411-11	CARBON	330	5%	1/4W
R745	1-249-411-11	CARBON	330	5%	1/4W
R746	1-249-411-11	CARBON	330	5%	1/4W
R747	1-249-411-11	CARBON	330	5%	1/4W
R748	1-249-411-11	CARBON	330	5%	1/4W
R749	1-249-411-11	CARBON	330	5%	1/4W
R750	1-249-412-11	CARBON	390	5%	1/4W
R751	1-249-411-11	CARBON	330	5%	1/4W
R752	1-249-429-11	CARBON	10K	5%	1/4W
R753	1-249-429-11	CARBON	10K	5%	1/4W
R774	1-249-424-11	CARBON	3.9K	5%	1/4W
R775	1-249-420-11	CARBON	1.8K	5%	1/4W
R776	1-249-417-11	CARBON	1K	5%	1/4W
R777	1-247-832-11	CARBON	1.1K	5%	1/4W
R778	1-249-411-11	CARBON	330	5%	1/4W
R779	1-249-412-11	CARBON	390	5%	1/4W
R780	1-249-407-11	CARBON	150	5%	1/4W
R781	1-249-409-11	CARBON	220	5%	1/4W
R782	1-249-411-11	CARBON	330	5%	1/4W
R783	1-249-413-11	CARBON	470	5%	1/4W
R784	1-249-415-11	CARBON	680	5%	1/4W
R785	1-249-417-11	CARBON	1K	5%	1/4W
R786	1-249-426-11	CARBON	5.6K	5%	1/4W
R787	1-249-430-11	CARBON	12K	5%	1/4W
R801	1-247-417-11	(WG,IT)...CARBON	1K	5%	1/4W
R802	1-247-417-11	(WG,IT)...CARBON	1K	5%	1/4W
R821	1-247-727-11	(WG,IT)...CARBON	10	5%	1/4W
R822	1-247-727-11	(WG,IT)...CARBON	10	5%	1/4W
R901	1-247-864-11	(AEP,UK,WG,IT)...CARBON	24K	5%	1/4W
R901	1-249-434-11	(E,EA,AUS).....CARBON	27K	5%	1/4W
R903	1-249-422-11	(E,EA,AUS)...CARBON	2.7K	5%	1/4W
R904	1-249-426-11	(E,EA,AUS)...CARBON	5.5K	5%	1/4W
R905	1-249-429-11	(E,EA,AUS)...CARBON	10K	5%	1/4W
RV41A	1-228-989-00	RES, ADJ, CARBON	470		
RV41B	1-228-989-00	RES, ADJ, CARBON	470		
RV42	1-230-499-11	RES, ADJ, CARBON	100K		
RV61A	1-228-989-00	RES, ADJ, CARBON	470		
RV61B	1-228-989-00	RES, ADJ, CARBON	470		
RV62	1-230-499-11	RES, ADJ, CARBON	100K		

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
RV131	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 100Hz)(INCLUDING LED)	S12	1-571-281-21	SWITCH, LEAF (REC A)
RV131	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 100Hz)	S13	1-571-281-21	SWITCH, LEAF (REC B)
RV132	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 400Hz)(INCLUDING LED)	S14A	1-571-281-21	SWITCH, LEAF (Cr02)
RV132	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 400Hz)	S14B	1-571-281-21	SWITCH, LEAF (Cr02)
RV133	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 1kHz) (INCLUDING LED)	S101	1-572-334-11	SWITCH, PUSH (2 KEY)(EQ ON/EQ REC)
RV133	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 1kHz)	S301	1-554-303-21	SWITCH, KEY BOARD (PHONO)
RV134	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (L 4kHz) (INCLUDING LED)	S302	1-554-303-21	SWITCH, KEY BOARD (TUNER)
RV134	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 4kHz)	S303	1-554-303-21	SWITCH, KEY BOARD (CD)
RV135	1-241-011-11	(E,EA,AUS)...RES, VAR, SLIDE 100K (L 12kHz)(INCLUDING LED)	S304	1-554-303-21	SWITCH, KEY BOARD (TAPE)
RV135	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (L 12kHz)	S305	1-554-303-21	SWITCH, KEY BOARD (AUX)
RV149	1-241-014-11	RES, VAR, CARBON 20K/20K (DBFB (SAT) LEVEL)	S306	1-554-303-21	SWITCH, KEY BOARD (SURROUND)
RV150	1-241-014-11	RES, VAR, CARBON 20K/20K (SURROUND LEVEL)	S307	1-554-303-21	SWITCH, KEY BOARD (DBFB (SAT))
RV151	1-241-016-11	RES, VAR, CARBON 100K (BALANCE)	S701	1-554-303-21	SWITCH, KEY BOARD (HIGH SPEED)
RV152	1-241-013-11	RES, VAR, CARBON 100K/100K (VOLUME)	S702	1-554-303-21	SWITCH, KEY BOARD (NORMAL SPEED)
RV231	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 100Hz)(INCLUDING LED)	S703	1-554-303-21	SWITCH, KEY BOARD (A FWD)
RV231	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 100Hz)	S704	1-554-303-21	SWITCH, KEY BOARD (A REV)
RV232	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 400Hz)(INCLUDING LED)	S705	1-554-303-21	SWITCH, KEY BOARD (A FF)
RV232	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 400Hz)	S706	1-554-303-21	SWITCH, KEY BOARD (A REW)
RV233	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 1kHz) (INCLUDING LED)	S707	1-554-303-21	SWITCH, KEY BOARD (A STOP)
RV233	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 1kHz)	S708	1-554-303-21	SWITCH, KEY BOARD (B FWD)
RV234	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 4kHz) (INCLUDING LED)	S709	1-554-303-21	SWITCH, KEY BOARD (B REV)
RV234	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 4kHz)	S710	1-554-303-21	SWITCH, KEY BOARD (B FF)
RV235	1-241-011-11	(E,EA,AUS)...RES, VAR SLIDE 100K (R 12kHz)(INCLUDING LED)	S711	1-554-303-21	SWITCH, KEY BOARD (B REW)
RV235	1-241-012-11	(AEP,UK,WG,IT)...RES, VAR, SLIDE 100K (R 12kHz)	S712	1-554-303-21	SWITCH, KEY BOARD (B STOP)
RV401	1-241-015-11	RES, VAR, CARBON 50K (MIC LEVEL)	S713	1-554-303-21	SWITCH, KEY BOARD (B REC)
RV501	1-228-994-00	RES, ADJ, CARBON 10K	S714	1-554-303-21	SWITCH, KEY BOARD (B PAUSE)
RV551	1-228-994-00	RES, ADJ, CARBON 10K	S715	1-554-303-21	SWITCH, KEY BOARD (B REC MUTE)
RV601	1-238-534-11	RES, VAR, CARBON 20K/20K (REC LEVEL)	S716	1-570-849-11	SWITCH, SLIDE (DOLBY NR)
RY81	1-515-614-11	RELAY	S717	1-570-837-11	SWITCH, SLIDE (DIRECTION)
RY190	1-515-533-11	RELAY	S920	△1-553-318-41	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)
S11A	1-571-281-21	SWITCH, LEAF (HALF)	T81	1-433-331-11	TRANSFORMER, BIAS OSCILLATION
S11B	1-571-281-21	SWITCH, LEAF (HALF)	T901	△1-450-063-11	(AEP,UK,WG,IT)...TRANSFORMER, POWER
			T901	△1-450-064-11	(E,EA,AUS).....TRANSFORMER, POWER
			VS901	△1-571-722-11	(E,EA,AUS)...SWITCH, VOLTAGE SELECTION (VOLTAGE)
			X313	1-577-101-11	VIBRATOR, CERAMIC 4.19MHz
			X701	1-577-358-21	VIBRATOR, CERAMIC 4MHz

ACCESSORY & PACKING MATERIAL

1-465-455-11	REMOTE COMMANDER (RM-S530)
1-501-369-11	(AEP,IT).....ANTENNA
1-501-374-11	(AEP,WG,IT)...ANTENNA, LOOP
1-575-668-11	CORD (WITH CONNECTOR)
3-751-553-11	(AEP).....MANUAL, INSTRUCTION
3-751-553-41	(AEP,WG,IT)...MANUAL, INSTRUCTION
3-707-584-01	COVER, BATTERY (for RM-S530)
*4-914-075-01	(AEP,WG,IT)...CUSHION (SP)
*4-935-383-01	CUSHION
4-921-934-01	SHEET, PROTECTION
*4-937-346-01	(AEP,WG,IT)...INDIVIDUAL CARTON

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.